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# Water Resources Data for Arkansas, Water Year 1972. Part 2. Water Quality Records

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1973

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1972

# Water Resources Data for Arkansas

## Water Year 1972

## Part 2. Water Quality Records

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U.S. GEOLOGICAL SURVEY WATER-DATA REPORT AR-72-2

Prepared in coopération with the Arkansas Geological Commission and with other State and Federal agencies

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Water resources data for the 1972 water year for Arkansas consist of records of discharge and water quality of streams, and water quality of lakes and reservoirs. This report contains water quality for 100 gaging stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating local, State, and Federal agencies in Arkansas.

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# 1972

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## Water Year 1972

## Part 2. Water Quality Records

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Prepared in cooperation with the Arkansas Geological
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Arkansas Geological Commission
Water Quality Office, Environmental Protection Agency
Forest Service, U.S. Department of Agriculture
Corps of Engineers, U.S. Army

Water resources records, 1972, for Arkansas are in the following reports of the U.S. Geological Survey:

1. Water Resources Data for Arkansas
   Part 1. Surface Water Records

2. Water Resources Data for Arkansas
   Part 2. Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
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[Letters after station name designate type of data:
(c), chemical; (t), water temperature;
(s), sediment]

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# WATER RESOURCES DATA FOR ARKANSAS, 1972

## Part 2. Water Quality Records

By B. F. Lambert and M. A. Moore

## INTRODUCTION

Water Resources Data for Arkansas, 1972, Part 2, contains information on the chemical, and physical characteristics of surface water in Arkansas. Pertinent water-quality data for streams in bordering States are also included. Arkansas district personnel who contributed significantly to the collection and preparation of data included in this report were: C. T. Bryant, H. R. Fancher, J. W. Gibbs, B. F. Lambert, M. A. Moore, M. K. Moore, and E. E. Morris. These data were collected by the Water Resources Division of the U.S. Geological Survey under the direction of R. T. Sniegocki, district chief, and by cooperating State and Federal agencies, as part of the National Water Data System.

The Geological Survey has published records of chemical quality, suspended sediment, and water temperatures since 1941 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Beginning with the 1964 water year, water-quality records also have been released by the Geological Survey in annual reports on a State-boundary basis. These reports are designed primarily for rapid release of data shortly after the end of the water year to meet local needs. The records will be published later in Geological Survey water-supply papers.

## COOPERATION

This report was prepared by the U.S. Geological Survey under cooperative agreement with the Arkansas Geological Commission, Norman F. Williams, State geologist.

Agencies furnishing assistance were:

Forest Service, U.S. Department of Agriculture
Water Quality Office, Environmental Protection Agency
Corps of Engineers, U.S. Army

Agencies furnishing additional records were:

Corps of Engineers, U.S. Army
Arkansas Game and Fish Commission
Arkansas Department of Pollution Control and Ecology

## DEFINITION OF TERMS

Terms related to water-quality and hydrologic data, as used in this report, are defined as follows:

Acre-foot (ac-ft, AC-FT) is a quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or 325,851 gallons.

Bed material is the shifting part of fragmented alluvial material of which the streambed is composed.

Biochemical oxygen demand (BOD) is the amount of oxygen required by bacteria while stabilizing decomposable organic matter under aerobic conditions.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.983471 acre-feet, or 646,317 gallons.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds present in a water and will vary with water compositions, concentration of reagent, temperature, period of contact, and other factors.

Coliform organisms are a group of bacteria used as an indicator of the sanitary quality of the water. The number of coliform colonies per 100 milliliters is determined by the immediate or delayed-incubation membrane-filter method.

Cubic foot per second (cfs, CFS) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

Discharge is the volume of water (or more broadly, total fluids) that passes a given point within a given period of time.

Mean discharge is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Drainage area of a stream at a specified location is that area, measured in horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river upstream from the specified point.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with the discharge record, the term is applied only to those gaging stations where a continuous record of discharge is obtained.

Hardness of water is a physical-chemical characteristic attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per liter (ug/l, UG/L) is a precise unit for expressing the concentration of chemical constituents in solution. One thousand micrograms per liter is equivalent to 1 milligram per liter. See below.

Milligrams per liter (mg/l, MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one-thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors in table 1, page 4. Concentration of suspended sediment also is expressed in milligrams per liter, and is based on the weight of sediment per liter of water-sediment mixture.

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

| Ion | Milti-ply by | Ion | Multi-ply by |
|---|---|---|---|
| Aluminum ($Al^{+3}$)*... | 0.11119 | Iodide ($I^{-1}$)...... | 0.00788 |
| Ammonia as $NH_4^{+1}$).. | .05544 | Iron ($Fe^{+3}$)*...... | .05372 |
| Barium ($Ba^{+2}$)...... | .01456 | Lead ($Pb^{+2}$)*...... | .00965 |
| Bicarbonate ($HCO_3^{-1}$) | .01639 | Lithium ($Li^{+1}$)*... | .14411 |
| Bromide ($Br^{-1}$)..... | .01251 | Magnesium ($Mg^{+2}$).. | .08226 |
| Calcium ($Ca^{+2}$)..... | .04990 | Manganese ($Mn^{+2}$)*. | .03640 |
| Carbonate ($CO_3^{-2}$).. | .03333 | Nickel ($Ni^{+2}$)*.... | .03406 |
| Chloride ($Cl^{-1}$).... | .02821 | Nitrate ($NO_3^{-1}$)... | .01613 |
| Chromium ($Cr^{+6}$)*... | .11539 | Nitrite ($NO_2^{-1}$)... | .02174 |
| Cobalt ($Co^{+2}$)*..... | .03394 | Phosphate ($PO_4^{-3}$). | .03159 |
| Copper ($Cu^{+2}$)*..... | .03148 | Potassium ($K^{+1}$)... | .02557 |
| Cyanide ($CN^{-1}$)*.... | .03844 | Sodium ($Na^{+1}$)..... | .04350 |
| Fluoride ($F^{-1}$)..... | .05264 | Strontium ($Sr^{+2}$)*. | .02283 |
| Hydrogen ($H^{+1}$)..... | .99209 | Sulfate ($SO_4^{-2}$)... | .02082 |
| Hydroxide ($OH^{-1}$)... | .05880 | Zinc ($Zn^{+2}$)*...... | .03060 |

*Constituent reported in micrograms per liter; multiply by factor and divide results by 1,000.

Partial-record station is a particular site where limited streamflow or water-quality data are collected systematically during a period of years for use in hydrologic analyses.

Plankton is the floating (or weakly swimming) animal or plantlife in a body of water consisting chiefly of minute plants (as diatoms and blue-green algae) and of minute animals (as protozoan, entomostracans, and various larvae).

Sediment is solid material that originates mostly from disintegrated rocks and is transformed by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment discharge is the rate at which dry weight of sediment passes a section of a stream, or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge by suspended-sediment concentration (mg/l), and by 0.0027.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/l).

Mean concentrations is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour period.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. This ratio should be known especially for water used for irrigating farmland.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in mg/l) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream, and it may differ in the same stream, as the composition of the water changes.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the use of a thermograph or a digital mechanism that automatically records water temperature on paper tape.

Tons per acre-foot indicates the dry weight of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

## SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

International Hydrological Decade (IHD) River Stations provide a general index of runoff and materials in the water balance (discharge of water, and dissolved and transported solids) of the world. In the United States, IHD Stations provide indices of runoff and of the general distribution of water in the principal river basins of the conterminous United States and Alaska.

Irrigation network stations are water-quality stations located at or near certain streamflow gaging stations west of the main stem of the Mississippi River. Data collected at these stations are used to evaluate the chemical quality of surface waters used for irrigation and the changes resulting from the drainage of irrigated lands. Prior to water year 1966, the data for these stations were published in the annual water-supply peper series "Quality of Surface Water for Irrigation, Western States."

Pesticide program is a network of regularly sampled water-quality stations where additional monthly samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Radiochemical program is a network of regularly sampled water-quality stations where additional samples are collected twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

## DOWNSTREAM ORDER AND STATION NUMBERS

Records are listed in downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering upstream from all main-stream stations are listed before the first main-stream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of water-quality stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each water-quality station, gaging station, and partial-record station has been assigned a station number on a national downstream order, except for some open bodies of water where station numbers consist of latitude and longitude. In assigning station numbers, no distinction is made between partial-record and continuous-record stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Water-quality stations at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete number for each station is made up of 8 digits (07362200). The first digits constitute the part number (07). The identification number for each station in this report appears just to the left of the station name. The records are listed in downstream order by parts. All records for a drainage basin containing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

## COLLECTION AND EXAMINATION OF DATA

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads. Discharge records for streams in Arkansas have been released in the report "Water Resources Data for Arkansas, 1972, Part 1. Surface Water Records."

The data in this report include a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the location, drainage area, periods of record for the various water-quality data, extremes of the pertinent data, and general remarks, in a format similar to that used for streamflow-gaging stations.

Data on the quality of surface water were collected from designated sampling sites (maps on p. 14-15) at predetermined intervals such as once daily, weekly, monthly or less frequently; whereas, at some sites it was necessary to continuously record data on a punched paper tape at 15-, 30-, or 60-minute intervals.

Water-quality information is presented for chemical quality, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, sodium adsorption ratio, specific conductance, and pH. Water-temperature data represent once-daily observations except for stations where a continuous temperature recorder furnishes information from which daily minimums and maximums are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations.

Prior to 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the Geological Survey began to use the metric system; data for chemical constituents and concentrations of suspended sediment are now reported in milligrams per liter and water temperatures are given in degrees Celsius (centigrade, °C). In waters with a density of 1,000 g/ml (grams per milliliter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1,000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per liter.

To convert temperature in degrees Fahrenheit to degrees Celsius, see table 2, below.

Table 2.--Temperature conversion table at 0.5°C intervals, degrees Fahrenheit (°F) to degrees Celsius (°C)*
[Temperature reported to nearest 0.5°C]

| °F | °C | °F | °C | °F | °C | °F | °C | °F | °C |
|---|---|---|---|---|---|---|---|---|---|
| 32 | 0.0 | 50 | 10.0 | 68 | 20.0 | 86 | 30.0 | 104 | 40.0 |
| 33 | .5 | 51 | 10.5 | 69. | 20.5 | 87 | 30.5 | 105 | 40.5 |
| 34 | 1.0 | 52 | 11.0 | 70 | 21.0 | 88 | 31.0 | 106 | 41.0 |
| 35 | 1.5 | 53 | 11.5 | 71 | 21.5 | 89 | 31.5 | 107 | 41.5 |
| 36 | 2.0 | 54 | 12.0 | 72 | 22.0 | 90 | 32.0 | 108 | 42.0 |
| 37 | 3.0 | 55 | 13.0 | 73 | 23.0 | 91 | 33.0 | 109 | 43.0 |
| 38 | 3.5 | 56 | 13.5 | 74 | 23.5 | 92 | 33.5 | 110 | 43.5 |
| 39 | 4.0 | 57 | 14.0 | 75 | 24.0 | 93 | 34.0 | 111 | 44.0 |
| 40 | 4.5 | 58 | 14.5 | 76 | 24.5 | 94 | 34.5 | 112 | 44.5 |
| 41 | 5.0 | 59 | 15.0 | 77 | 25.0 | 95 | 35.0 | 113 | 45.0 |
| 42 | 5.5 | 60 | 15.5 | 78 | 25.5 | 96 | 35.5 | 114 | 45.5 |
| 43 | 6.0 | 61 | 16.0 | 79 | 26.0 | 97 | 36.0 | 115 | 46.0 |
| 44 | 6.5 | 62 | 16.5 | 80 | 26.5 | 98 | 36.5 | 116 | 46.5 |
| 45 | 7.0 | 63 | 17.0 | 81 | 27.0 | 99 | 37.0 | 117 | 47.0 |
| 46 | 8.0 | 64 | 18.0 | 82 | 28.0 | 100 | 38.0 | 118 | 48.0 |
| 47 | 8.5 | 65 | 18.5 | 83 | 28.5 | 101 | 38.5 | 119 | 48.5 |
| 48 | 9.0 | 66 | 19.0 | 84 | 29.0 | 102 | 39.0 | 120 | 49.0 |
| 49 | 9.5 | 67 | 19.5 | 85 | 29.5 | 103 | 39.5 | 121 | 49.5 |

*C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. (See "Definition of Terms," p. 3.)

## Solutes

The methods of collecting and analyzing water samples for determining the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different rates of water discharge, depending on the source of material and the turbulence and the mixing of the stream. Some streams must be sampled at several verticals across the channel to determine accurately the solute load.

## Temperature

Water temperatures are measured at most of the water-quality stations. For daily stations, the water temperatures are taken about the same time each day that the sample is collected. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some stream may be affected by waste-heat discharges.

At stations equipped with continuous recording thermographs, the records consist of the maximum and minimum temperatures for each day and the monthly averages.

## Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samplers usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to compute the mean concentration in the cross section.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time discharge weighted average). Therefore, for those days when the published sediment-discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily loads of suspended sediment were estimated by using water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

## WATER-SUPPLY PAPERS

Table 3 shows the annual series of water-supply papers that give information on quality of surface waters in Arkansas. Data for the lower Mississippi River basin are given in Part 7; and for the western Gulf of Mexico basin in Part 8.

Table 3.--Water-supply paper numbers and parts, water years 1946-70

| Year | Parts 7-8 | Year | Parts 7-8 | Part 7 |
|---|---|---|---|---|
| 1946 | A1050 | 1959 | 1644 | -- |
| 1947 | A1102 | 1960 | 1744 | -- |
| 1948 | B1133 | 1961 | 1884 | -- |
| 1949 | B1163 | 1962 | 1944 | -- |
| 1950 | 1188 | 1963 | 1950 | -- |
| 1951 | 1199 | 1964 | 1957 | -- |
| 1952 | 1252 | 1965 | 1964 | -- |
| 1953 | 1292 | 1966 | 1994 | -- |
| 1954 | 1352 | 1967 | 2014 | -- |
| 1955 | 1402 | 1968 | -- | C2096 |
| 1956 | 1452 | 1969 | -- | C2146 |
| 1957 | 1522 | 1970 | -- | C2156 |
| 1958 | 1573 | | | |

A Includes Parts 1-14.
B Includes Parts 7-14.
C In preparation.

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Hem, J. D., 1970, Study and interpretation of the chemical characteristics of natural water, 2nd ed: U.S. Geol. Survey Water-Supply Paper 1473, 363 p.

Porterfield, George, 1972, Computations of fluvial-sediment discharge: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C3, 66 p.

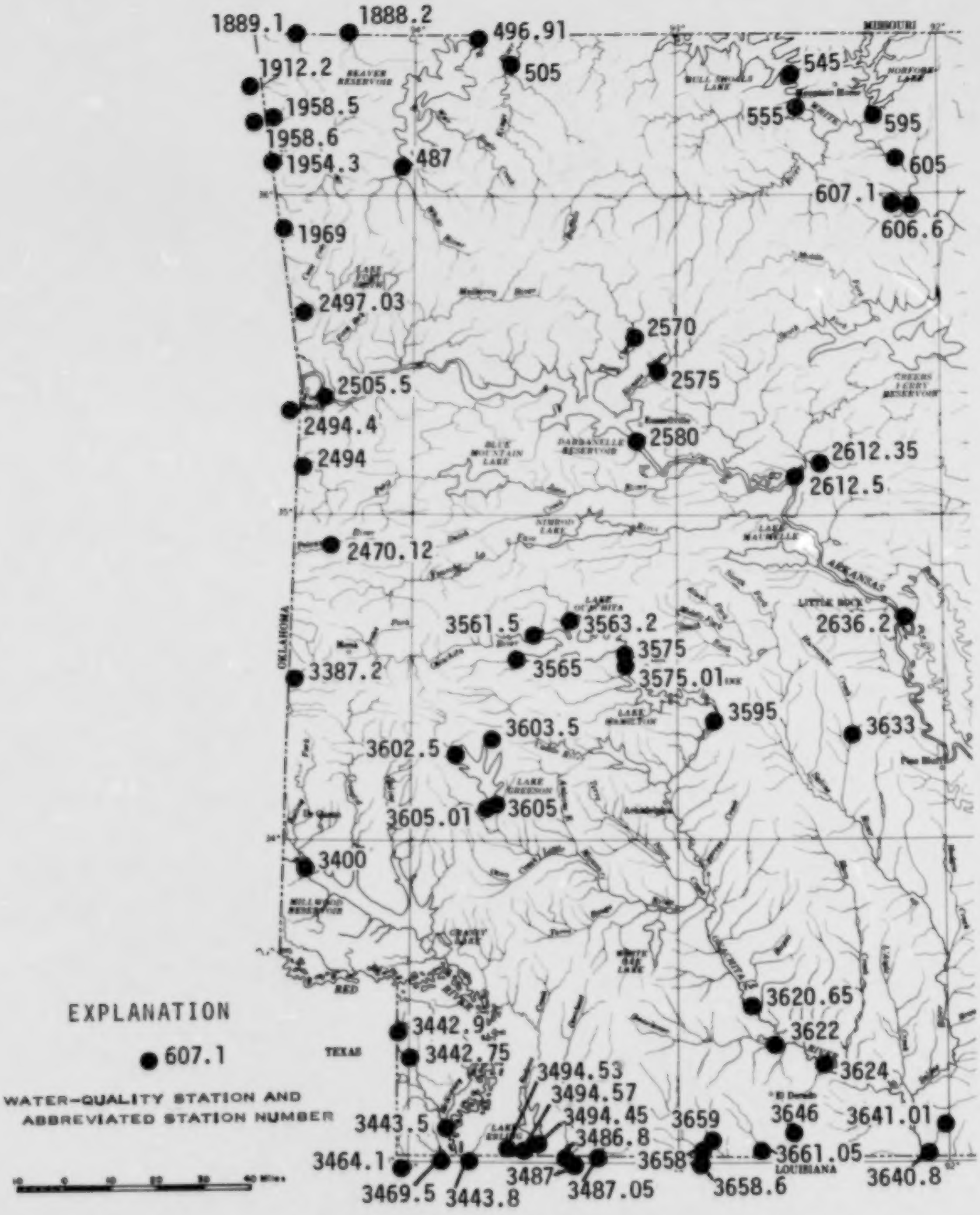

Figure 1.--Location of water-quality stations in western Arkansas.

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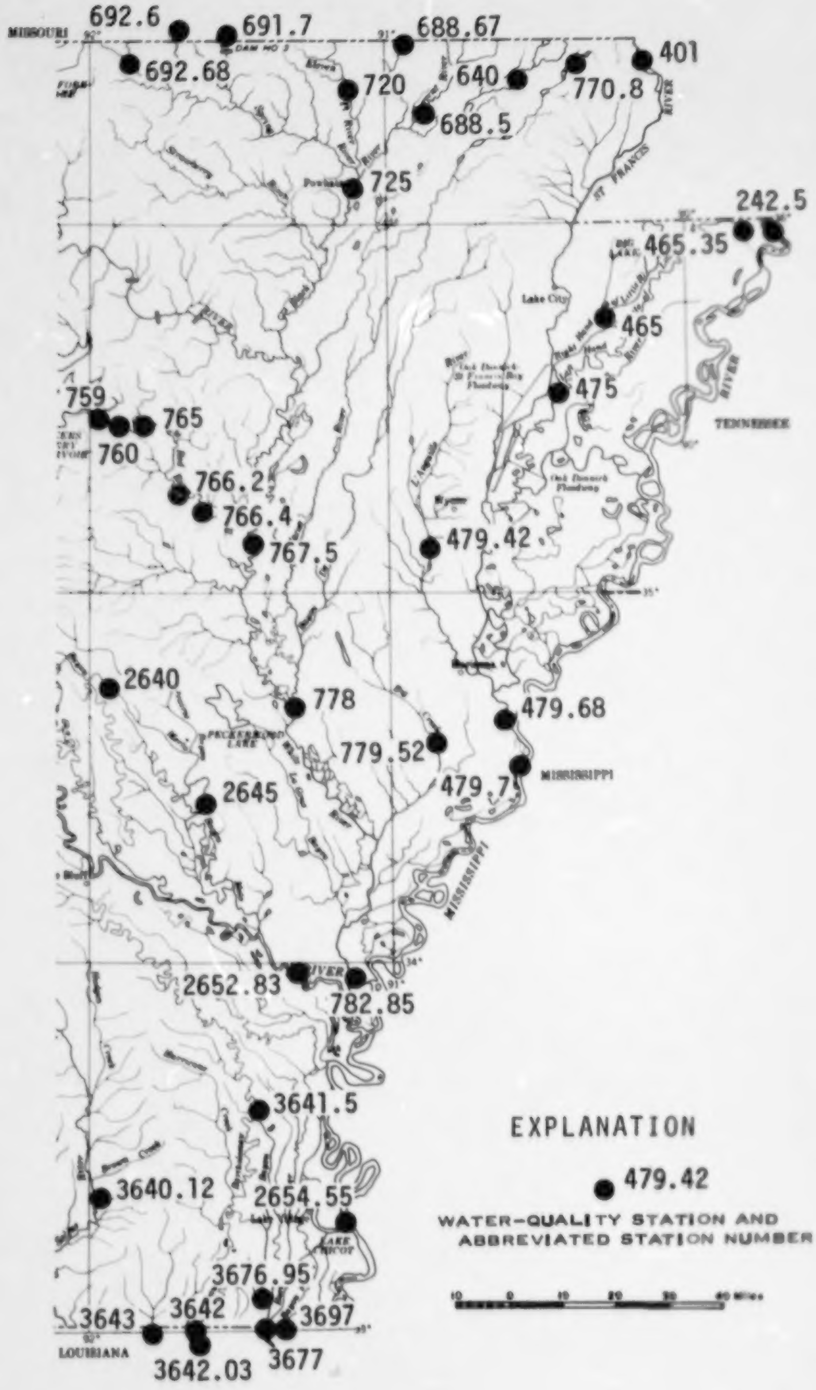

Figure 2.--Location of water-quality stations in eastern Arkansas.

# WATER-QUALITY RECORDS

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## 07024250 MISSISSIPPI RIVER AT HUFFMAN, ARK.

LOCATION.--Lat 35°58'25", long 89°43'31", in SE¼SE¼SW¼ sec.29, T.16 N., R.13 E., Mississippi County, at the Grain Company loading platform, 0.5 mile east of State Highway 137 at Huffman, 2.1 miles northeast of Hickman, and 6.5 miles upstream from Obion River.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | 217000 | | | | | 102 | | 20 | | |
| OCT. 19 | 180000 | | | | | | | | | |
| OCT. 20 | | | | | | 111 | | 17 | | |
| NOV. 2 | | | | 44.0 | 15.0 | 107 | 61 | 18 | 0.700 | 0.110 |
| NOV. 15 | 252000 | | | | | 112 | | 18 | | |
| NOV. 30 | 248000 | | | | | 120 | | 19 | | |
| DEC. 14 | 561000 | | | | | 113 | | 6 | | |
| JAN. 5 | 533000 | | | | | | | | | |
| JAN. 17 | 692000 | | | | | 85 | | 18 | | |
| FEB. 1 | 572000 | 300K | 100.0K | 37.6 | 8.7 | 9 | 34 | 16 | 1.400 | 0.300 |
| FEB. 14 | 357000 | | | | | 90 | | 14 | | |
| FEB. 29 | 608000 | | | | | 80 | | 17 | | |
| MAR. 14 | 456000 | | | | | 71 | | 14 | | |
| APR. 5 | 546000 | | | | | 80 | | 18 | | |
| APR. 17 | 777000 | | | | | 87 | | 18 | | |
| MAY 2 | | | | 36.0 | 10.7 | | 40 | 18 | 1.420 | 0.060 |
| MAY 16 | 808000 | | | | | 54 | | 13 | | |
| JUNE 7 | 910000 | | | | | 127 | | 17 | | |
| JUNE 21 | 378000 | | | | | 131 | | 18 | | |
| JULY 5 | 530000 | | | | | | | 24 | | |
| JULY 17 | 323000 | | | | | 80 | | 16 | | |
| AUG. 1 | 340000 | 1500 | 400.0 | 30.0 | 16.0 | 94 | 84 | 14 | 0.200 | 0.110 |
| AUG. 15 | 332000 | | | | | 110 | | 16 | | |
| SEP. 6 | 253000 | | | | | 127 | | 15 | | |
| SEP. 20 | 319000 | | | | | 114 | | 17 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | | | | | | 500 | 8.00 | 20.0 | | |
| OCT. 20 | | | | | | 344 | 8.10 | 20.0 | | 52.0 |
| NOV. 2 | 270 | 49 | 320 | 176 | 112.0 | 377 | 8.10 | | 5 | 85.0 |
| NOV. 15 | | | | | | 333 | 8.10 | 14.0 | | 120.0 |
| NOV. 30 | | | | | | 357 | 8.40 | 7.0 | | 80.0 |
| DEC. 14 | | | | | | 105 | 6.60 | 11.0 | | 300.0 |
| JAN. 17 | | | | | | 294 | 7.00 | 5.0 | | 160.0 |
| FEB. 1 | 195 | 109 | 304 | 130 | 94.0 | 230 | 7.00 | 3.0 | 20 | 100.0 |
| FEB. 14 | | | | | | 292 | 7.70 | 7.0 | | 200.0 |
| FEB. 29 | | | | | | 219 | 7.70 | 12.0 | | 100.0 |
| MAR. 14 | | | | | | 240 | 8.00 | 9.0 | | 200.0 |
| APR. 5 | | | | | | 270 | 7.30 | 8.0 | | 120.0 |
| APR. 17 | | | | | | 373 | 7.30 | 13.0 | | 120.0 |
| MAY 2 | 246 | 20 | 266 | 136 | 92.0 | 294 | 6.70 | 18.0 | | |
| MAY 16 | | | | | | 352 | 7.50 | 18.0 | | 220.0 |
| JUNE 7 | | | | | | 442 | 8.00 | 24.0 | | 25.0K |
| JUNE 21 | | | | | | 302 | 7.80 | 27.0 | | 25.0K |
| JULY 5 | | | | | | 351 | 7.40 | 24.0 | | |
| JULY 17 | | | | | | 351 | 6.30 | 26.0 | | 75.0 |
| AUG. 1 | 256 | 147 | 403 | 160 | 94.0 | 311 | 7.60 | 29.0 | 40 | 100.0 |
| AUG. 15 | | | | | | 340 | 7.00 | 29.0 | | 62.0 |
| SEP. 6 | | | | | | 442 | 7.90 | 28.0 | | 73.0 |
| SEP. 20 | | | | | | 305 | 7.00 | 26.0 | | 240.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MPN-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 5 | 8.3 | | 1.8 | | | |
| OCT. 20 | 8.8 | | 1.7 | | | |
| NOV. 2 | 7.9 | | 1.0 | 170 | 500 | 7 |
| NOV. 15 | 9.6 | | 1.4 | | | |
| NOV. 30 | 11.1 | | 2.3 | | | |
| DEC. 14 | 10.9 | | 3.1 | | | |
| JAN. 17 | 12.5 | | 4.0 | | | |
| FEB. 1 | 11.9 | | 2.4 | 200 | 2600 | 337 |
| FEB. 14 | 12.6 | | 5.1 | | | |
| FEB. 29 | 11.5 | | 3.9 | | | |
| MAR. 14 | 10.2 | | 2.8 | | | |
| APR. 5 | 9.6 | | 4.4 | | | |
| APR. 17 | 8.3 | | 3.5 | | | |
| MAY 2 | | | | 232 | | |
| MAY 16 | 8.6 | | 3.1 | | | |
| JUNE 7 | 7.3 | | 1.9 | | | |
| JUNE 21 | 7.8 | | 1.2 | | | |
| JULY 17 | 8.1 | 99.0 | 2.0 | | | |
| AUG. 1 | 6.4 | 82.0 | 1.3 | 500 | 5250 | 24 |
| AUG. 15 | 8.9 | 100.0 | 2.8 | | | |
| SEP. 6 | | | 1.3 | | | |
| SEP. 20 | 5.8 | 71.0 | 1.2 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 1 | | 2K | 100K | | 10K | 80K | | 50K | 20 |
| SEP. 20 | | | | | | | | | |

K Less than.

## 07040100 ST. FRANCIS RIVER AT ST. FRANCIS, ARK.

LOCATION.--Lat 36°27'21", long 90°08'13", Clay County, at gaging station at bridge on U.S. Highway 62 at St. Francis.

DRAINAGE AREA.--1,772 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1972.

REMARKS.--Discharge obtained from rating curves furnished by Corps of Engineers, Memphis, Tenn. Additional analyses furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DIS-CHARGE (CFS) | DIS-SOLVED SILICA (SIO2) (MG/L) | DIS-SOLVED IRON (FE) (UG/L) | DIS-SOLVED MAN-GANESE (MN) (UG/L) | DIS-SOLVED CAL-CIUM (CA) (MG/L) | DIS-SOLVED MAG-NE-SIUM (MG) (MG/L) | DIS-SOLVED SODIUM (NA) (MG/L) | DIS-SOLVED PO-TAS-SIUM (K) (MG/L) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV. 17... | 182 | 7.4 | 30 | 150 | 33 | 14 | 5.9 | 1.5 | 152 | 0 | 125 |
| JAN. 05... | 1320 | 6.3 | 90 | 50 | 18 | 10 | 2.8 | 1.9 | 92 | 0 | 75 |
| MAR. 07... | 2580 | 4.8 | 120 | 40 | 12 | 6.6 | 2.6 | 1.9 | 50 | 0 | 41 |
| MAY 02... | 9250 | 6.1 | 130 | 60 | 8.9 | 4.9 | 2.5 | 1.7 | 44 | 0 | 36 |
| AUG. 22... | 310 | 8.7 | 0 | 20 | 25 | 12 | 4.2 | 1.7 | 140 | 0 | 115 |

| DATE | DIS-SOLVED SULFATE (SO4) (MG/L) | DIS-SOLVED CHLO-RIDE (CL) (MG/L) | DIS-SOLVED FLUO-RIDE (F) (MG/L) | DIS-SOLVED NITRATE (N) (MG/L) | DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L) | ORGANIC NITRO-GEN (N) (MG/L) | TOTAL PHOS-PHORUS (P) (MG/L) | DIS-SOL-VED-PHOS-PHORUS (P) (MG/L) | DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L) | DIS-SOLVED SOLIDS (TONS PER AC-FT) |
|---|---|---|---|---|---|---|---|---|---|---|
| NOV. 17... | 27 | 5.2 | .1 | .00 | .00 | .23 | .01 | .00 | 175 | .24 |
| JAN. 05... | 14 | 3.6 | .0 | .00 | .00 | .23 | .23 | .04 | 113 | .15 |
| MAR. 07... | 13 | 5.0 | .1 | .50 | .03 | .54 | .15 | .03 | 84 | .11 |
| MAY 02... | 9.6 | 3.7 | .2 | .09 | .04 | .23 | .12 | .04 | 63 | .09 |
| AUG. 22... | 8.5 | 3.6 | .1 | .04 | .07 | .31 | .14 | .00 | 134 | .18 |

| DATE | DIS-SOLVED SOLIDS (TONS PER DAY) | HARD-NESS (CA,MG) (MG/L) | NON-CAR-BONATE HARD-NESS (MG/L) | PERCENT SODIUM | SODIUM AD-SORP-TION RATIO | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | COLOR (PLAT-INUM-COBALT UNITS) | DIS-SOLVED OXYGEN (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| NOV. 17... | 86.0 | 140 | 16 | 8 | .2 | 295 | 7.9 | 13.0 | 5 | 8.0 |
| JAN. 05... | 403 | 86 | 10 | 6 | .1 | 190 | 7.9 | 3.5 | 35 | 8.8 |
| MAR. 07... | 585 | 56 | 16 | 9 | .2 | 135 | 7.6 | 7.5 | 120 | 9.6 |
| MAY 02... | 1570 | 42 | 6 | 11 | .2 | 100 | 7.4 | 18.0 | 100 | 7.3 |
| AUG. 22... | 112 | 110 | 0 | 7 | .2 | 240 | 7.4 | 27.5 | 8 | 7.0 |

## 07040100 ST. FRANCIS RIVER AT ST. FRANCIS, ARK.--continued

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | PER-CENT SATUR-ATION | CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) | FECAL COLI-FORM (COL. PER 100 ML) | STREP-TOCOCCI (COL-ONIES PER 100 ML) | METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L) | ALDRIN (UG/L) | CHLOR-DANE (UG/L) | DDD (UG/L) | DDE (UG/L) | DDT (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| NOV. 17... | 75 | 4 | 35 | 35 | .02 | -- | -- | -- | -- | -- |
| JAN. 05... | 66 | 13 | 160 | 800 | .05 | -- | -- | -- | -- | -- |
| MAR. 07... | 80 | 26 | 240 | 680 | .02 | -- | -- | -- | -- | -- |
| MAY 02... | 76 | 10 | 280 | 3000 | .03 | -- | -- | -- | -- | -- |
| AUG. 22... | 88 | 12 | 170 | 150 | .07 | .00 | .0 | .00 | .00 | .00 |

| DATE | DI-ELDRIN (UG/L) | ENDRIN (UG/L) | HEPTA-CHLOR (UG/L) | HEPTA-CHLOR EPOXIDE (UG/L) | LINDANE (UG/L) | 2,4-D (UG/L) | 2,4,5-T (UG/L) | SILVEX (UG/L) |
|---|---|---|---|---|---|---|---|---|
| JAN. 05... | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG. 22... | .00 | .00 | .00 | .00 | .00 | .09 | .00 | .08 |

| DATE | DIS-SOLVED CAD-MIUM (CD) (UG/L) | DIS-SOLVED CHRO-MIUM (CR) (UG/L) | DIS-SOLVED COBALT (CO) (UG/L) | DIS-SOLVED COPPER (CU) (UG/L) | DIS-SOLVED LEAD (PB) (UG/L) | DIS-SOLVED NICKEL (NI) (UG/L) | DIS-SOLVED SILVER (AG) (UG/L) | DIS-SOLVED ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|---|
| JAN. 05... | 0 | 1 | 1 | 150 | 12 | 35 | 2 | 410 |
| AUG. 22... | -- | -- | -- | -- | -- | -- | -- | -- |

## 07040100 ST. FRANCIS RIVER AT ST. FRANCIS, ARK.--continued

### ADDITIONAL CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 6 | 190 | | | | | 215 | | 4 | | |
| OCT. 20 | 153 | | | | | 147 | | 6 | | |
| NOV. 2 | 96 | | | 28.8 | 18.0 | 138 | 18 | 4 | 0.200 | 0.010K |
| NOV. 16 | 180 | | | | | 131 | | 6 | | |
| DEC. 1 | 258 | | | | | 128 | | 5 | | |
| DEC. 15 | 4190 | | | | | 110 | | 4 | | |
| JAN. 17 | | | | | | 92 | | 13 | | |
| FEB. 1 | | 100K | 100.0K | 20.0 | 9.2 | 80 | 8 | 4 | 0.900 | 0.200 |
| FEB. 15 | | | | | | 97 | | 4 | | |
| MAR. 1 | | | | | | 52 | | 4 | | |
| MAR. 15 | | | | | | 64 | | 6 | | |
| APR. 5 | | | | | | 82 | | 6 | | |
| APR. 17 | | | | | | 36 | | 4 | | |
| MAY 2 | | | | 11.2 | 4.4 | 37 | 8 | 3 | 0.300 | 0.050 |
| MAY 16 | | | | | | 48 | | 4 | | |
| JUNE 7 | | | | | | 82 | | 4 | | |
| JUNE 21 | | | | | | 107 | | 6 | | |
| JULY 5 | | | | | | 17 | | 5 | | |
| JULY 17 | | | | | | 99 | | 5 | | |
| AUG. 1 | | 2375 | 475.0 | 10.0 | 4.0 | 33 | 36 | 4 | 0.400 | 0.120 |
| AUG. 15 | | | | | | 91 | | 6 | | |
| SEP. 6 | | | | | | 56 | | 5 | | |
| SEP. 20 | | | | | | 73 | | 6 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 6 | | | | | | 400 | 8.30 | 20.0 | | |
| OCT. 20 | | | | | | 250 | 8.10 | 18.0 | | 75.0 |
| NOV. 2 | 154 | 65 | 219 | 146 | 72.0 | 222 | 8.10 | 18.0 | 0 | 60.0 |
| NOV. 16 | | | | | | 222 | 8.10 | 13.0 | | 40.0 |
| DEC. 1 | | | | | | 206 | 8.10 | 6.0 | | 25.0K |
| DEC. 15 | | | | | | 185 | 7.80 | 12.0 | | 250.0 |
| JAN. 17 | | | | | | 192 | 7.80 | 0.0 | | 40.0 |
| FEB. 1 | 113 | 59 | 172 | 88 | 50.0 | 147 | 7.60 | 1.0 | 30 | 50.0 |
| FEB. 15 | | | | | | 188 | 8.00 | 6.0 | | 70.0 |
| MAR. 1 | | | | | | 111 | 7.00 | 11.0 | | 150.0 |
| MAR. 15 | | | | | | 140 | 7.80 | 11.0 | | 180.0 |
| APR. 5 | | | | | | 151 | 6.90 | 9.0 | | 90.0 |
| APR. 17 | | | | | | 110 | 6.80 | 16.0 | | 400.0 |
| MAY 2 | 112 | 235 | 347 | 46 | 28.0 | 100 | 6.50 | 19.0 | 120 | 130.0 |
| MAY 16 | | | | | | 124 | 7.20 | 18.0 | | 100.0 |
| JUNE 7 | | | | | | 156 | 7.70 | 23.0 | | 60.0 |
| JUNE 21 | | | | | | 156 | 7.70 | 25.0 | | 130.0 |
| JULY 5 | | | | | | 43 | 6.70 | 22.0 | | 700.0 |
| JULY 17 | | | | | | 213 | 6.40 | 25.0 | | 180.0 |
| AUG. 1 | 132 | 299 | 431 | 42 | 24.0 | 71 | 6.90 | 26.0 | 200 | 270.0 |
| AUG. 15 | | | | | | 173 | 7.70 | 25.0 | | 43.0 |
| SEP. 6 | | | | | | 220 | 7.90 | 22.0 | | 110.0 |
| SEP. 20 | | | | | | 153 | 7.50 | 26.0 | | 140.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 6 | 8.3 | | 0.9 | | | |
| OCT. 20 | 8.0 | | 1.9 | | | |
| NOV. 2 | 9.0 | | 2.7 | 13 | 100 | 13 |
| NOV. 16 | 9.5 | | 2.1 | | | |
| DEC. 1 | 11.5 | | 2.1 | | | |
| DEC. 15 | 9.9 | | 1.6 | | | |
| JAN. 17 | 13.6 | | 3.2 | | | |
| FEB. 1 | | | | 4K | 4K | 177 |
| FEB. 15 | 12.1 | | 2.9 | | | |
| MAR. 1 | 10.7 | | 2.6 | | | |
| MAR. 15 | 9.0 | | 1.3 | | | |
| APR. 5 | 9.4 | | 2.3 | | | |
| APR. 17 | 6.4 | | 3.7 | | | |
| MAY 2 | 8.4 | | 2.8 | 330 | | |
| MAY 16 | 7.3 | | 2.5 | | | |
| JUNE 7 | 7.4 | | 2.3 | | | |
| JUNE 21 | 3.5 | | 3.2 | | | |
| JULY 5 | 6.8 | 77.0 | 2.3 | | | |
| JULY 17 | 7.6 | 90.0 | 1.7 | | | |
| AUG. 1 | 5.6 | 68.0 | 1.8 | 10000 | 28000 | 125 |
| AUG. 15 | 9.5 | 113.0 | 3.6 | | | |
| SEP. 6 | 7.8 | 88.0 | 1.1 | | | |
| SEP. 20 | 7.5 | 91.0 | 2.9 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 1 | | 2K | 10K | | 140 | 80K | | 50K | 70 |

K Less than.

### 07046500 RIGHT HAND CHUTE OF LITTLE RIVER AT BIG LAKE OUTLET, NEAR MANILA, ARK.
(Formerly published as Big Lake Outlet near Manila)

LOCATION.--Lat 35°51'00", long 90°07'40" (revised), in sec.10, T.14 N., R.9 E., Mississippi County, at Corps of Engineers gaging station at bridge on State Highway 18, 3.5 miles southeast of Manila, and at mile 23.0.

DRAINAGE AREA.--2,084 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | 672 | | | | | 170 | | 16 | | |
| OCT. 19 | 568 | | | | | 184 | | 18 | | |
| NOV. 2 | 112 | | | 80.8 | 30.6 | 323 | 8 | 4 | 0.200 | 0.070 |
| NOV. 15 | 352 | | | | | 178 | | 21 | | |
| NOV. 30 | 440 | | | | | 175 | | 18 | | |
| DEC. 15 | 1620 | | | | | 133 | | 14 | | |
| JAN. 17 | | | | | | 124 | | 15 | | |
| FEB. 1 | | 100K | 100.0 | 35.2 | 21.4 | 134 | 10 | 15 | 0.500 | 0.400 |
| FEB. 14 | | | | | | 71 | | 8 | | |
| FEB. 29 | | | | | | 51 | | 11 | | |
| MAR. 14 | | | | | | 87 | | 11 | | |
| APR. 5 | | | | | | 130 | | 14 | | |
| APR. 17 | | | | | | 137 | | 15 | | |
| MAY 2 | | | | 21.6 | 6.3 | 67 | 5 | 10 | 0.800 | 0.080 |
| MAY 16 | | | | | | 131 | | 13 | | |
| JUNE 7 | | | | | | 132 | | 14 | | |
| JUNE 21 | | | | | | 151 | | 16 | | |
| JULY 5 | | | | | | 123 | | 16 | | |
| JULY 17 | | | | | | 90 | | 10 | | |
| AUG. 1 | | 1650 | 100.0 | 18.0 | 8.0 | 50 | 39 | 4 | 0.500 | 0.140 |
| AUG. 15 | | | | | | 102 | | 10 | | |
| SEP. 6 | | | | | | 141 | | 13 | | |
| SEP. 20 | | | | | | 306 | | 4 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | | | | | | 408 | 8.20 | 24.0 | | |
| OCT. 19 | | | | | | 344 | 8.40 | 20.0 | | 150.0 |
| NOV. 2 | 353 | 87 | 440 | 328 | 202.0 | 500 | 8.10 | 18.0 | 5 | 80.0 |
| NOV. 15 | | | | | | 357 | 7.90 | 13.0 | | 80.0 |
| NOV. 30 | | | | | | 307 | 8.10 | 7.0 | | 25.0 |
| DEC. 15 | | | | | | 270 | 7.90 | 14.0 | | 85.0 |
| JAN. 17 | | | | | | 285 | 7.90 | | | 70.0 |
| FEB. 1 | 199 | 34 | 233 | 148 | 68.0 | 263 | 8.10 | 2.0 | 30 | 80.0 |
| FEB. 14 | | | | | | 163 | 7.30 | 8.0 | | 200.0 |
| FEB. 29 | | | | | | 165 | 7.30 | 15.0 | | 180.0 |
| MAR. 14 | | | | | | 210 | 7.70 | 14.0 | | 200.0 |
| APR. 5 | | | | | | 240 | 7.70 | 11.0 | | 90.0 |
| APR. 17 | | | | | | 370 | 7.80 | 15.0 | | 100.0 |
| MAY 2 | 199 | 117 | 316 | 80 | 54.0 | 164 | 6.70 | 19.0 | 160 | 150.0 |
| MAY 16 | | | | | | 321 | 7.70 | | | 90.0 |
| JUNE 7 | | | | | | 307 | 7.60 | 25.0 | | 25.0K |
| JUNE 21 | | | | | | 303 | 7.60 | 28.0 | | 25.0K |
| JULY 5 | | | | | | 274 | 7.70 | 23.0 | | 55.0 |
| JULY 17 | | | | | | 213 | 6.90 | 28.0 | | 110.0 |
| AUG. 1 | 153 | 105 | 258 | 76 | 44.0 | 122 | 7.00 | 26.0 | 100 | 150.0 |
| AUG. 15 | | | | | | 210 | 7.50 | 26.0 | | 22.0 |
| SEP. 6 | | | | | | 342 | 7.80 | 24.0 | | 42.0 |
| SEP. 20 | | | | | | 515 | 7.90 | 28.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 5 | 6.6 | | 4.9 | | | |
| OCT. 19 | 6.6 | | 2.4 | | | |
| NOV. 2 | 11.8 | | 3.1 | 10 | 1700 | 140 |
| NOV. 15 | 5.4 | | 2.2 | | | |
| NOV. 30 | 9.3 | | 2.1 | | | |
| DEC. 15 | 7.9 | | 1.9 | | | |
| JAN. 17 | 12.8 | | 2.6 | | | |
| FEB. 1 | 12.8 | | 2.5 | 57 | 400 | 1333 |
| FEB. 14 | 10.1 | | 2.4 | | | |
| FEB. 29 | 9.4 | | 7.3 | | | |
| MAR. 14 | 7.5 | | 2.1 | | | |
| APR. 5 | 9.2 | | 2.2 | | | |
| APR. 17 | 7.3 | | 2.3 | | | |
| MAY 2 | 5.3 | | 1.8 | 30 | | |
| MAY 16 | 6.4 | | 3.2 | | | |
| JUNE 7 | 7.4 | | 4.2 | | | |
| JUNE 21 | 7.2 | | 5.1 | | | |
| JULY 5 | 4.9 | 56.0 | 1.3 | | | |
| JULY 17 | 4.5 | 57.0 | 3.2 | | | |
| AUG. 1 | 4.8 | 59.0 | 1.2 | | 1550 | 226 |
| AUG. 15 | 7.3 | 89.0 | 2.2 | | | |
| SEP. 6 | 5.1 | 60.0 | | | | |
| SEP. 20 | 12.2 | 154.0 | 2.4 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 1 | | 2K | 100K | | 10 | 80K | | 50K | 22 |
| SEP. 20 | | | | | | | | | |

K Less than.

## 07046535 PEMISCOT BAYOU NEAR YARBRO, ARK.

LOCATION.--Lat 35°59'30", long 89°52'26", in NE¼SE¼ sec.23, T.16 N., R.11 E., Mississippi County, at bridge on service road 50 ft downstream from Interstate Highway 55, 2.0 miles northeast of Yarbro, and 4.1 miles downstream from crooked Lake Bayou.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | 22 | | | | | 273 | | 5 | | |
| OCT. 19 | 18 | | | | | 308 | | 6 | | |
| NOV. 3 | 89 | | | 52.0 | 16.1 | 179 | 18 | 18 | 0.300 | 0.010K |
| NOV. 15 | 10 | | | | | 328 | | 6 | | |
| NOV. 30 | 14 | | | | | 322 | | 9 | | |
| DEC. 14 | 22 | | | | | 390 | | 3 | | |
| JAN. 17 | 18 | | | | | 316 | | 3 | | |
| FEB. 1 | 22 | 600 | 600.0 | 71.2 | 22.8 | 294 | 13 | 3 | 1.100 | 0.200 |
| FEB. 14 | | | | | | 279 | | 4 | | |
| FEB. 15 | 3 | | | | | | | | | |
| FEB. 29 | 4 | | | | | 310 | | 3 | | |
| MAR. 14 | 3 | | | | | 312 | | 3 | | |
| APR. 5 | 74 | | | | | 116 | | 3 | | |
| APR. 17 | 128 | | | | | 90 | | 4 | | |
| MAY 2 | 89 | | | 39.2 | 13.1 | 89 | 1K | 4 | 2.700 | 0.140 |
| MAY 10 | 84 | | | | | | | | | |
| MAY 16 | | | | | | 294 | | 5 | | |
| JUNE 7 | 84 | | | | | 315 | | 4 | | |
| JUNE 21 | 18 | | | | | 324 | | 5 | | |
| JULY 5 | 50 | | | | | 123 | | 7 | | |
| JULY 17 | 41 | | | | | 43 | | 4 | | |
| AUG. 1 | 46 | 2450 | 925.0 | 89.0 | 26.0 | 308 | 13 | 3 | 0.100K | 0.050 |
| AUG. 15 | 80 | | | | | 323 | | 5 | | |
| SEP. 6 | 80 | | | | | 304 | | 4 | | |
| SEP. 20 | 41 | | | | | 155 | | 17 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICRCMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | | | | | | 625 | 7.80 | 24.0 | | |
| OCT. 19 | | | | | | 434 | 8.00 | 23.0 | | 125.0 |
| NOV. 3 | 248 | 33 | 281 | 196 | 130.0 | 312 | 8.20 | 16.0 | 5 | 55.0 |
| NOV. 15 | | | | | | 500 | 8.00 | 17.0 | | 70.0 |
| NOV. 30 | | | | | | 500 | 8.10 | 8.0 | | 50.0 |
| DEC. 14 | | | | | | 454 | 7.80 | 14.0 | | 65.0 |
| JAN. 17 | | | | | | 500 | 7.90 | 5.0 | | 30.0 |
| FEB. 1 | 311 | 78 | 389 | 272 | 178.0 | 400 | 7.90 | 5.0 | 10 | 65.0 |
| FEB. 14 | | | | | | 454 | 8.00 | 15.0 | | 150.0 |
| FEB. 29 | | | | | | 408 | 8.00 | 19.0 | | 55.0 |
| MAR. 14 | | | | | | 540 | 8.00 | 18.0 | | 100.0 |
| APR. 5 | | | | | | 220 | 7.10 | 9.0 | | 500.0 |
| APR. 17 | | | | | | 220 | 7.20 | 18.0 | | 1000.0 |
| MAY 2 | 340 | 2204 | 2544 | 152 | 98.0 | 188 | 6.30 | 20.0 | 480 | 3800.0 |
| MAY 16 | | | | | | 565 | 7.90 | 21.0 | | 110.0 |
| JUNE 7 | | | | | | 558 | 7.90 | 25.0 | | 100.0 |
| JUNE 21 | | | | | | 476 | 7.30 | 32.0 | | 25.0K |
| JULY 5 | | | | | | 238 | 7.30 | 26.0 | | 700.0 |
| JULY 17 | | | | | | 119 | 6.10 | 27.0 | | 700.0 |
| AUG. 1 | 382 | 72 | 454 | 328 | 222.0 | 483 | 7.60 | 29.0 | 5 | 90.0 |
| AUG. 15 | | | | | | 500 | 7.80 | 29.0 | | 22.0 |
| SEP. 6 | | | | | | 560 | 8.20 | 26.0 | | 25.0K |
| SEP. 20 | | | | | | 356 | 7.80 | 28.0 | | 30.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 5 | 11.3 | | 4.1 | | | |
| OCT. 19 | 13.8 | | 5.0 | | | |
| NOV. 2 | | | | 100 | 1300 | 67 |
| NOV. 3 | 6.3 | | 2.0 | | | |
| NOV. 15 | 11.2 | | 2.4 | | | |
| NOV. 30 | 15.4 | | 4.8 | | | |
| DEC. 14 | 11.5 | | 7.4 | | | |
| JAN. 17 | 13.2 | | 2.3 | | | |
| FEB. 1 | 12.7 | | 2.2 | 3 | 4K | 207 |
| FEB. 14 | 11.1 | | 3.1 | | | |
| FEB. 29 | 13.0 | | 2.7 | | | |
| MAR. 14 | 13.0 | | 3.9 | | | |
| APR. 5 | 7.5 | | 4.7 | | | |
| APR. 17 | 4.5 | | 5.0 | | | |
| MAY 2 | 6.1 | | 3.5 | 323 | | |
| MAY 16 | 9.6 | | 3.8 | | | |
| JUNE 7 | 6.6 | | 1.9 | | | |
| JUNE 21 | 9.6 | | 3.4 | | | |
| JULY 5 | 5.6 | 68.0 | 1.6 | | | |
| JULY 17 | 3.6 | 44.0 | 6.4 | | | |
| AUG. 1 | 9.6 | 123.0 | 3.0 | 52 | 175 | 12 |
| AUG. 15 | 10.3 | 138.0 | 2.2 | | | |
| SEP. 6 | 9.2 | 112.0 | | | | |
| SEP. 20 | 6.5 | 82.0 | 2.6 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 1 | | 2K | 100K | | 150 | 80K | | 50K | 80 |
| SEP. 20 | | | | | | | | | |

K Less than.

## 07047500 ST. FRANCIS RIVER AT MARKED TREE, ARK.

LOCATION.--Lat 35°31'20", long 90°25'27", in SE¼NW¼ sec.2, T.10 N., R.6 E., Poinsett County, at gaging station, near left bank on downstream side of bridge on U.S. Highway 63 at Marked Tree, 5.4 miles downstream from Little River, 7.6 miles downstream from dam of Poinsett County Drainage District 7, and at mile 147.0.

DRAINAGE AREA.--5,148 sq mi, includes that of floodway.

PERIOD OF RECORD.--Chemical analyses: October 1945 to September 1946, November 1949 to September 1955, October 1965 to September 1966, October 1967 to September 1972.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | MEAN DIS- CHARGE (CFS) | DIS- SOLVED IRON (FE) (UG/L) | DIS- SOLVED MAN- GANESE (MN) (UG/L) | BICAR- BONATE (HCO3) (MG/L) | CAR- BONATE (CO3) (MG/L) | ALKA- LINITY AS CACO3 (MG/L) | DIS- SOLVED SULFATE (SO4) (MG/L) | DIS- SOLVED CHLO- RIDE (CL) (MG/L) | DIS- SOLVED NITRATE (N) (MG/L) | DIS- SOLVED NITRITE (N) (MG/L) | DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) | ORGANIC NITRO- GEN (N) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | | |
| 26... | 156 | 50 | 210 | 300 | 0 | 246 | 27 | 6.8 | .40 | .04 | .06 | .38 |
| NOV. | | | | | | | | | | | | |
| 30... | 126 | -- | -- | 296 | 0 | 243 | 27 | 5.4 | .00 | .00 | -- | -- |
| DEC. | | | | | | | | | | | | |
| 28... | 205 | 0 | 150 | 274 | 0 | 225 | 26 | 5.0 | .54 | .01 | .07 | .23 |
| JAN. | | | | | | | | | | | | |
| 12... | 363 | -- | -- | 224 | 0 | 186 | 29 | 6.3 | .86 | .05 | -- | -- |
| FEB. | | | | | | | | | | | | |
| 08... | 580 | -- | -- | 208 | 0 | 170 | 24 | 5.4 | .93 | .09 | .07 | .64 |
| MAR. | | | | | | | | | | | | |
| 07... | 1690 | -- | -- | 96 | 0 | 79 | 19 | 9.2 | 1.0 | .03 | .09 | 1.1 |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR. | | | | | | | | | | | | |
| 11... | 1250 | 240 | 60 | 208 | 0 | 170 | 22 | 9.6 | .60 | .00 | -- | -- |
| MAY | | | | | | | | | | | | |
| 16... | 1720 | -- | -- | 192 | 0 | 157 | 26 | 9.6 | .16 | .03 | .01 | .19 |
| JUNE | | | | | | | | | | | | |
| 22... | 782 | -- | -- | 240 | 0 | 197 | 20 | 9.7 | .09 | .06 | .02 | .37 |
| JULY | | | | | | | | | | | | |
| 21... | 1410 | -- | -- | 140 | 0 | 115 | 22 | 6.2 | .50 | .12 | .21 | .53 |
| AUG. | | | | | | | | | | | | |
| 03... | 2050 | -- | -- | 100 | 0 | 82 | 13 | 5.4 | .63 | .00 | .02 | .35 |
| SEP. | | | | | | | | | | | | |
| 08... | 166 | -- | -- | 280 | 0 | 230 | 25 | 6.2 | .36 | .08 | .00 | .24 |

| DATE | TOTAL PHOS- PHORUS (P) (MG/L) | TOTAL FILT- RABLE RESIDUE (MG/L) | TOTAL NON- FILT- RABLE RESIDUE (MG/L) | HARD- NESS (CA,MG) (MG/L) | NON- CAR- BONATE HARD- NESS (MG/L) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) | PH (UNITS) | COLOR (PLAT- INUM- COBALT UNITS) | TUR- BID- ITY (MG/L) | CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) | BIO- CHEM- ICAL OXYGEN DEMAND (MG/L) | IMME- DIATE COLI- FORM (COL. PER 100 ML) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | | |
| 26... | .11 | -- | 107 | 260 | 14 | 505 | 7.7 | 25 | 120 | 19 | 2.0 | 7500 |
| NOV. | | | | | | | | | | | | |
| 30... | .20 | -- | 21 | 230 | 0 | 485 | 8.1 | 18 | 30 | 8 | 1.6 | -- |
| DEC. | | | | | | | | | | | | |
| 28... | .32 | -- | 59 | 230 | 8 | 468 | 8.0 | 5 | 25 | 6 | 3.3 | 3700 |
| JAN. | | | | | | | | | | | | |
| 12... | .73 | 260 | 186 | 190 | 8 | 386 | 7.9 | 5 | 25 | 28 | 3.6 | 2600 |
| FEB. | | | | | | | | | | | | |
| 08... | .52 | -- | 215 | 180 | 6 | 380 | 8.0 | 35 | 260 | 15 | 2.5 | 6500 |
| MAR. | | | | | | | | | | | | |
| 07... | .86 | -- | 310 | 92 | 14 | 210 | 7.9 | 160 | 150 | 28 | 5.6 | 2500 |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR. | | | | | | | | | | | | |
| 11... | .17 | -- | 310 | 170 | 0 | 377 | 7.7 | 60 | -- | 18 | 2.0 | 2100 |
| MAY | | | | | | | | | | | | |
| 16... | .33 | -- | 71 | 160 | 0 | 376 | 7.6 | 160 | 60 | 12 | 3.7 | 800 |
| JUNE | | | | | | | | | | | | |
| 22... | .50 | 330 | 109 | 210 | 62 | 625 | 8.1 | 10 | 90 | 11 | 3.1 | 1400 |
| JULY | | | | | | | | | | | | |
| 21... | .31 | -- | 139 | 160 | 20 | 292 | 7.8 | 35 | 130 | 6 | -- | 6000 |
| AUG. | | | | | | | | | | | | |
| 03... | .53 | -- | 141 | 85 | 3 | 190 | 7.6 | 40 | 130 | 25 | 2.8 | 5500 |
| SEP. | | | | | | | | | | | | |
| 08... | 1.2 | -- | 117 | 250 | 20 | 497 | 8.0 | 60 | 75 | 9 | 3.2 | 7200 |

## 07047500 ST. FRANCIS RIVER AT MARKED TREE, ARK.--continued

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | FECAL COLI-FORM (COL. PER 100 ML) | STREP-TOCOCCI (COL-ONIES PER 100 ML) | ALDRIN IN FILT. FRAC. (UG/L) | ALDRIN IN SUSP. FRAC. (UG/L) | ALDRIN (UG/L) | ALDRIN IN BOTTOM DE-POSITS (UG/KG) | CHLOR-DANE IN FILT. FRAC. (UG/L) | CHLOR-DANE IN SUSP. FRAC. (UG/L) | CHLOR-DANE (UG/L) | CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG) | DDD IN FILT. FRAC. (UG/L) | DDD IN SUSP. FRAC. (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | | |
| 26... | E25 | E100 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV. | | | | | | | | | | | | |
| 30... | E53 | <10 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC. | | | | | | | | | | | | |
| 28... | 1400 | 760 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN. | | | | | | | | | | | | |
| 12... | 340 | 500 | .00 | .00 | .00 | <.2 | .0 | .0 | .0 | <1 | .00 | .02 |
| FEB. | | | | | | | | | | | | |
| 08... | 670 | E6200 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR. | | | | | | | | | | | | |
| 07... | 390 | 1400 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21... | -- | -- | .00 | .00 | .00 | -- | .0 | .0 | .0 | -- | .00 | .01 |
| APR. | | | | | | | | | | | | |
| 11... | 380 | E120 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY | | | | | | | | | | | | |
| 16... | E600 | E100 | .00 | .00 | .00 | <.2 | .0 | .0 | .0 | <1 | .00 | .01 |
| JUNE | | | | | | | | | | | | |
| 22... | 270 | 90 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JULY | | | | | | | | | | | | |
| 21... | -- | 440 | .00 | .00 | .00 | -- | .0 | .0 | .0 | -- | .00 | .00 |
| AUG. | | | | | | | | | | | | |
| 03... | E100 | 740 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP. | | | | | | | | | | | | |
| 08... | 800 | 600 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | DDD (UG/L) | DDD IN BOTTOM DE-POSITS (UG/KG) | DDE IN FILT. FRAC. (UG/L) | DDE IN SUSP. FRAC. (UG/L) | DDE (UG/L) | DDE IN BOTTOM DE-POSITS (UG/KG) | DDT IN FILT. FRAC. (UG/L) | DDT IN SUSP. FRAC. (UG/L) | DDT (UG/L) | DDT IN BOTTOM DE-POSITS (UG/KG) | DI-AZINON IN FILT. FRAC. (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| JAN. | | | | | | | | | | | |
| 12... | .02 | 8.3 | .00 | .02 | .02 | 5.8 | .00 | .06 | .06 | 66 | .01 |
| MAR. | | | | | | | | | | | |
| 21... | .01 | -- | .00 | .01 | .01 | -- | .00 | .02 | .02 | -- | .00 |
| MAY | | | | | | | | | | | |
| 16... | .01 | 8.2 | .00 | .00 | .00 | 3.9 | .00 | .02 | .02 | 6.6 | .00 |
| JULY | | | | | | | | | | | |
| 21... | .00 | -- | .00 | .00 | .00 | -- | .00 | .00 | .00 | -- | .01 |

| DATE | DI-AZINON IN SUSP. FRAC. (UG/L) | DI-AZINON (UG/L) | DI-ELDRIN IN FILT. FRAC. (UG/L) | DI-ELDRIN IN SUSP. FRAC. (UG/L) | DI-ELDRIN (UG/L) | DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG) | ENDRIN IN FILT. FRAC. (UG/L) | ENDRIN IN SUSP. FRAC. (UG/L) | ENDRIN (UG/L) | ENDRIN IN BOTTOM DE-POSITS (UG/KG) | HEPTA-CHLOR IN FILT. FRAC. (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| JAN. | | | | | | | | | | | |
| 12... | .00 | .01 | .00 | .02 | .02 | <.2 | .00 | .00 | .00 | <.2 | .00 |
| MAR. | | | | | | | | | | | |
| 21... | -- | -- | .00 | .01 | .01 | -- | .00 | .00 | .00 | -- | .00 |
| MAY | | | | | | | | | | | |
| 16... | .00 | .00 | .00 | .00 | .00 | 3.5 | .00 | .00 | .00 | <.2 | .00 |
| JULY | | | | | | | | | | | |
| 21... | .01 | .02 | .00 | .00 | .00 | -- | .00 | .00 | .00 | -- | .00 |

| DATE | HEPTA-CHLOR IN SUSP. FRAC. (UG/L) | HEPTA-CHLOR (UG/L) | HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG) | HEPTA-CHLOR EPOXIDE IN FILT. FRAC. (UG/L) | HEPTA-CHLOR EPOXIDE IN SUSP. FRAC. (UG/L) | HEPTA-CHLOR EPOXIDE (UG/L) | HEPTA-CHLOR EPOXIDE IN BOT-TOM DE-POSITS (UG/KG) | LINDANE IN FILT. FRAC. (UG/L) | LINDANE IN SUSP. FRAC. (UG/L) | LINDANE (UG/L) | LINDANE IN BOTTOM DE-POSITS (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| JAN. | | | | | | | | | | | |
| 12... | .00 | .00 | <.2 | .00 | .00 | .00 | <.2 | .00 | .00 | .00 | <.2 |
| MAR. | | | | | | | | | | | |
| 21... | .00 | .00 | -- | .00 | .00 | .00 | -- | .00 | .00 | .00 | -- |
| MAY | | | | | | | | | | | |
| 16... | .00 | .00 | <.2 | .00 | .00 | .00 | <.2 | .00 | .00 | .00 | <.2 |
| JULY | | | | | | | | | | | |
| 21... | .00 | .00 | -- | .00 | .00 | .00 | -- | .00 | .00 | .00 | -- |

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## 07047500 ST. FRANCIS RIVER AT MARKED TREE, ARK.--continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | MALA- THION IN FILT. FRAC. (UG/L) | MALA- THION IN SUSP. FRAC. (UG/L) | MALA- THION (UG/L) | METHYL PARA- THION IN FILT. FRAC. (UG/L) | METHYL PARA- THION IN SUSP. FRAC. (UG/L) | METHYL PARA- THION (UG/L) | PARA- THION IN FILT. FRAC. (UG/L) | PARA- THION IN SUSP. FRAC. (UG/L) | PARA- THION (UG/L) | PCB IN FILT. FRAC. (UG/L) | PCB IN SUSP. FRAC. (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| JAN. 12... | .00 | .00 | .00 | .01 | .00 | .01 | .00 | .00 | .00 | .0 | .0 |
| MAR. 21... | .00 | -- | -- | .00 | -- | -- | .00 | -- | -- | .0 | .0 |
| MAY 16... | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .0 | .0 |
| JULY 21... | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .0 | .0 |

| DATE | PCB (UG/L) | PCB IN BOTTOM DE- POSITS (UG/KG) | 2,4-D IN FILT. FRAC. (UG/L) | 2,4-D IN SUSP. FRAC. (UG/L) | 2,4-D (UG/L) | 2,4,5-T IN FILT. FRAC. (UG/L) | 2,4,5-T IN SUSP. FRAC. (UG/L) | 2,4,5-T (UG/L) | SILVEX IN FILT. FRAC. (UG/L) | SILVEX IN SUSP. FRAC. (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| JAN. 12... | .0 | -- | .04 | .66 | .70 | .01 | .00 | .01 | .00 | .00 |
| MAR. 21... | .0 | -- | .02 | .00 | .02 | .03 | .00 | .03 | .00 | .00 |
| MAY 16... | .0 | <2 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| JULY 21... | .0 | -- | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |

| DATE | SILVEX (UG/L) | DIS- SOLVED ARSENIC (AS) (UG/L) | DIS- SOLVED CAD- MIUM (CD) (UG/L) | HEXA- VALENT CHRO- MIUM (CR6) (UG/L) | DIS- SOLVED COBALT (CO) (UG/L) | DIS- SOLVED COPPER (CU) (UG/L) | DIS- SOLVED LEAD (PB) (UG/L) | DIS- SOLVED LITHIUM (LI) (UG/L) | DIS- SOLVED MERCURY (HG) (UG/L) | DIS- SOLVED NICKEL (NI) (UG/L) | DIS- SOLVED SILVER (AG) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26... | -- | <10 | 0 | <10 | 0 | 1 | 2 | 10 | .7 | 3 | 1 |
| DEC. 28... | -- | <10 | 0 | <10 | 0 | 3 | 0 | 10 | 1.4 | 2 | 1 |
| JAN. 12... | .00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR. 21... | .00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR. 11... | -- | 10 | 0 | <10 | 1 | 6 | 0 | -- | <.5 | 0 | -- |
| MAY 16... | .00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUNE 22... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JULY 21... | .00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | DIS SOLVED ZINC (ZN) (UG/L) | DIS- SOLVED GROSS ALPHA AS U-NAT. (PC/L) | DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L) | SUS- PENDED GROSS ALPHA AS U-NAT. (PC/L) | SUS- PENDED GROSS ALPHA AS U-NAT. (UG/L) | DIS- SOLVED GROSS BETA AS CS-137 (PC/L) | SUS- PENDED GROSS BETA AS CS-137 (PC/L) | DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L) | SUS- PENDED GROSS BETA AS SR90 /Y90 (PC/L) | DIS- SOLVED RA-226 (RADON METHOD) (PC/L) | DIS- SOLVED URANIUM (U) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26... | 20 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC. 28... | 30 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN. 12... | -- | <1.2 | <3.5 | 3.3 | 10 | 4.5 | 9.2 | 3.6 | 8.0 | .00 | .34 |
| MAR. 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR. 11... | 20 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUNE 22... | -- | <1.5 | <4.6 | 2.5 | 7.6 | 5.1 | 3.5 | 4.4 | 2.8 | .11 | .77 |
| JULY 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

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## 07047500 ST. FRANCIS RIVER AT MARKED TREE, ARK.--continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

### FIELD ANALYSES

| DATE | MEAN DIS-CHARGE (CFS) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | DIS-SOLVED OXYGEN (MG/L) | PER-CENT SATUR-ATION |
|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | |
| 26... | 156 | 296 | 0 | 261 | 567 | 8.3 | 17.5 | -- | -- |
| NOV. | | | | | | | | | |
| 30... | 126 | 282 | 0 | 230 | 490 | 7.8 | 4.5 | 10.5 | 86 |
| DEC. | | | | | | | | | |
| 28... | 205 | 262 | 0 | 215 | 466 | 7.6 | 13.0 | 9.2 | 87 |
| JAN. | | | | | | | | | |
| 12... | 363 | 220 | 0 | 180 | 308 | 7.9 | 4.0 | 9.8 | 81 |
| FEB. | | | | | | | | | |
| 08... | 580 | -- | -- | -- | -- | -- | 3.0 | 12.1 | 96 |
| MAR. | | | | | | | | | |
| 07... | 1690 | 96 | 0 | 79 | 226 | 7.2 | 9.0 | 9.0 | 83 |
| 21... | -- | -- | -- | -- | -- | -- | 10.0 | -- | -- |
| APR. | | | | | | | | | |
| 11... | 1260 | 196 | 0 | 160 | 406 | 7.6 | 15.5 | 9.3 | 93 |
| MAY | | | | | | | | | |
| 16... | 1720 | 196 | 0 | 161 | 370 | 7.9 | 21.0 | 7.6 | 87 |
| JUNE | | | | | | | | | |
| 22... | 782 | 246 | 0 | 202 | 435 | 8.1 | 26.0 | 6.4 | 77 |
| JULY | | | | | | | | | |
| 21... | 1410 | -- | -- | -- | -- | -- | 28.5 | 5.4 | 72 |
| AUG. | | | | | | | | | |
| 03... | 2050 | 94 | 0 | 77 | 142 | 7.7 | 26.5 | 6.0 | 75 |
| SEP. | | | | | | | | | |
| 08... | 166 | 256 | 0 | 210 | 470 | 8.1 | 26.0 | 5.8 | 72 |

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## 07047942 L'ANGUILLE RIVER NEAR COLT, ARK.

LOCATION.--Lat 35°08'40", long 90°52'42", in NE¼NW¼ sec.15, T.6 N., R.2 E., St. Francis County, at gaging station near center of span on downstream side of bridge on State Highway 306, 1.1 miles downstream from Lick Creek, 3.9 miles northwest of Colt, and at mile 194.9.

DRAINAGE AREA.--535 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1972.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | INSTANTANEOUS DISCHARGE (CFS) | DISSOLVED SILICA (SIO2) (MG/L) | DISSOLVED IRON (FE) (UG/L) | DISSOLVED MANGANESE (MN) (UG/L) | DISSOLVED CALCIUM (CA) (MG/L) | DISSOLVED MAGNESIUM (MG) (MG/L) | DISSOLVED SODIUM (NA) (MG/L) | DISSOLVED POTASSIUM (K) (MG/L) | BICARBONATE (HCO3) (MG/L) | CARBONATE (CO3) (MG/L) | ALKALINITY AS CACO3 (MG/L) | DISSOLVED SULFATE (SO4) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | | |
| 26... | 1.1 | 6.6 | 60 | 260 | 51 | 20 | 26 | 7.0 | 232 | 0 | 190 | 19 |
| NOV. | | | | | | | | | | | | |
| 30... | 6.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC. | | | | | | | | | | | | |
| 28... | 86 | -- | 410 | 260 | -- | -- | -- | -- | 96 | 0 | 79 | -- |
| FEB. | | | | | | | | | | | | |
| 08... | 236 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR. | | | | | | | | | | | | |
| 07... | 665 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR. | | | | | | | | | | | | |
| 11... | 736 | 6.7 | 310 | 60 | 10 | 3.6 | 5.6 | 6.0 | 36 | 0 | 30 | 16 |
| MAY | | | | | | | | | | | | |
| 16... | 265 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUNE | | | | | | | | | | | | |
| 22... | 25 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG. | | | | | | | | | | | | |
| 03... | 160 | -- | 0 | 200 | 47 | 17 | 18 | 3.6 | 226 | 0 | 186 | -- |
| SEP. | | | | | | | | | | | | |
| 08... | 653 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | DISSOLVED CHLORIDE (CL) (MG/L) | DISSOLVED FLUORIDE (F) (MG/L) | DISSOLVED NITRATE (N) (MG/L) | DISSOLVED AMMONIA NITROGEN (N) (MG/L) | ORGANIC NITROGEN (N) (MG/L) | TOTAL PHOSPHORUS (P) (MG/L) | DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) | TOTAL FILTRABLE RESIDUE (MG/L) | DISSOLVED SOLIDS (TONS PER AC-FT) | DISSOLVED SOLIDS (TONS PER DAY) | TOTAL NONFILTRABLE RESIDUE (MG/L) | HARDNESS (CA,MG) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | | |
| 26... | 67 | .8 | .28 | .00 | .56 | .07 | 301 | -- | .41 | .89 | -- | 210 |
| NOV. | | | | | | | | | | | | |
| 30... | -- | -- | -- | .10 | .65 | .12 | -- | -- | -- | -- | -- | -- |
| DEC. | | | | | | | | | | | | |
| 28... | -- | -- | -- | .00 | .73 | .36 | -- | -- | -- | -- | -- | -- |
| FEB. | | | | | | | | | | | | |
| 08... | -- | -- | -- | .12 | 1.3 | .30 | -- | 310 | -- | -- | 370 | -- |
| MAR. | | | | | | | | | | | | |
| 07... | -- | -- | -- | .11 | 1.3 | .40 | -- | -- | -- | -- | -- | -- |
| APR. | | | | | | | | | | | | |
| 11... | 6.2 | .0 | .01 | .06 | 1.0 | .09 | 80 | -- | .11 | 159 | -- | 40 |
| MAY | | | | | | | | | | | | |
| 16... | -- | -- | -- | .09 | 1.2 | .65 | -- | -- | -- | -- | -- | -- |
| JUNE | | | | | | | | | | | | |
| 22... | -- | -- | -- | .09 | 1.2 | .12 | -- | -- | -- | -- | -- | -- |
| AUG. | | | | | | | | | | | | |
| 03... | -- | -- | 1.2 | .03 | .12 | .26 | -- | -- | -- | -- | -- | 190 |
| SEP. | | | | | | | | | | | | |
| 08... | -- | -- | -- | .00 | .02 | .06 | -- | 190 | -- | -- | 30 | -- |

| DATE | NONCARBONATE HARDNESS (MG/L) | PERCENT SODIUM | SODIUM ADSORPTION RATIO | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | COLOR (PLATINUM-COBALT UNITS) | TURBIDITY (MG/L) | CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) | BIOCHEMICAL OXYGEN DEMAND (MG/L) | IMMEDIATE COLIFORM (COL. PER 100 ML) | FECAL COLIFORM (COL. PER 100 ML) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | |
| 26... | 18 | 19 | .7 | 510 | 7.9 | 15 | 66 | 26 | 2.7 | -- | -- |
| NOV. | | | | | | | | | | | |
| 30... | -- | -- | -- | 601 | 7.7 | 15 | 60 | 16 | 4.9 | -- | E260 |
| DEC. | | | | | | | | | | | |
| 28... | -- | -- | -- | 220 | 7.2 | 70 | 110 | 22 | 3.1 | 2600 | 720 |
| FEB. | | | | | | | | | | | |
| 08... | -- | -- | -- | 133 | 7.4 | 200 | 550 | 34 | 2.5 | 5200 | 1900 |
| MAR. | | | | | | | | | | | |
| 07... | -- | -- | -- | 128 | 7.0 | 600 | 260 | 60 | -- | 1600 | 670 |
| APR. | | | | | | | | | | | |
| 11... | 10 | 21 | .4 | 114 | 7.2 | 200 | 310 | 30 | 3.8 | E620 | 230 |
| MAY | | | | | | | | | | | |
| 16... | -- | -- | -- | 135 | 7.0 | 200 | 300 | 62 | 3.4 | E1100 | 200 |
| JUNE | | | | | | | | | | | |
| 22... | -- | -- | -- | 496 | 7.5 | 25 | 160 | 27 | 4.4 | E800 | 360 |
| AUG. | | | | | | | | | | | |
| 03... | 4 | 17 | .6 | 633 | 7.7 | 10 | 20 | 30 | 2.5 | 2300 | E360 |
| SEP. | | | | | | | | | | | |
| 08... | -- | -- | -- | 298 | 7.4 | 20 | 30 | 10 | 2.5 | 6200 | 900 |

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## 07047942 L'ANGUILLE RIVER NEAR COLT, ARK.--continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREP-TOCOCCI (COL-ONIES PER 100 ML) | ALDRIN (UG/L) | ALDRIN IN BOTTOM DE-POSITS (UG/KG) | CHLOR-DANE (UG/L) | CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG) | DDD (UG/L) | DDD IN BOTTOM DE-POSITS (UG/KG) | DDE (UG/L) | DDE IN BOTTOM DE-POSITS (UG/KG) | DDT (UG/L) | DDT IN BOTTOM DE-POSITS (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | |
| 26... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV. | | | | | | | | | | | |
| 30... | 620 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC. | | | | | | | | | | | |
| 28... | 660 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB. | | | | | | | | | | | |
| 08... | E10000 | .00 | <.2 | .0 | <1 | .00 | 60 | .00 | 21 | .00 | 6.6 |
| MAR. | | | | | | | | | | | |
| 07... | 560 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR. | | | | | | | | | | | |
| 11... | E100 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY | | | | | | | | | | | |
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUNE | | | | | | | | | | | |
| 22... | 170 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG. | | | | | | | | | | | |
| 03... | 300 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP. | | | | | | | | | | | |
| 08... | 960 | .00 | <.2 | .0 | <1 | .00 | 60 | .00 | 26 | .00 | 17 |

| DATE | DI-AZINON (UG/L) | DI-ELDRIN (UG/L) | DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG) | ENDRIN (UG/L) | ENDRIN IN BOTTOM DE-POSITS (UG/KG) | HEPTA-CHLOR (UG/L) | HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG) | HEPTA-CHLOR EPOXIDE (UG/L) | HEPTA-CHLOR EPOXIDE IN BOT-TOM DE-POSITS (UG/KG) | LINDANE (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | |
| 26... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC. | | | | | | | | | | |
| 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB. | | | | | | | | | | |
| 08... | -- | .02 | <.2 | .00 | <.2 | .00 | <.2 | .00 | <.2 | .00 |
| APR. | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG. | | | | | | | | | | |
| 03... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP. | | | | | | | | | | |
| 08... | .00 | .01 | <.2 | .00 | <.2 | .00 | <.2 | .00 | <.2 | .00 |

| DATE | LINDANE IN BOTTOM DE-POSITS (UG/KG) | MALA-THION (UG/L) | MALA-THION IN BOTTOM DE-POSITS (UG/KG) | METHYL PARA-THION (UG/L) | METHYL PARA-THION IN BOT-TOM DE-POSITS (UG/KG) | PARA-THION (UG/L) | PARA-THION IN BOTTOM DE-POSITS (UG/KG) | 2,4-D (UG/L) | 2,4-D IN BOTTOM DE-POSITS (UG/KG) | 2,4,5-T (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | |
| 26... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC. | | | | | | | | | | |
| 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB. | | | | | | | | | | |
| 08... | <.2 | -- | <.2 | -- | <.2 | -- | <.2 | .00 | <.5 | .03 |
| APR. | | | | | | | | | | |
| 11... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG. | | | | | | | | | | |
| 03... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP. | | | | | | | | | | |
| 08... | <.2 | .00 | -- | .00 | -- | .00 | -- | .10 | <3.2 | .10 |

| DATE | 2,4,5-T IN BOTTOM DE-POSITS (UG/KG) | SILVER (UG/L) | SILVER IN BOTTOM DE-POSITS (UG/KG) | DIS-SOLVED ARSENIC (AS) (UG/L) | DIS-SOLVED CAD-MIUM (CD) (UG/L) | HEXA-VALENT CHRO-MIUM (CR6) (UG/L) | DIS-SOLVED COBALT (CO) (UG/L) | DIS-SOLVED COPPER (CU) (UG/L) | DIS-SOLVED LEAD (PB) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | |
| 26... | -- | -- | -- | <10 | 0 | <10 | 0 | 5 | 0 |
| DEC. | | | | | | | | | |
| 28... | -- | -- | -- | 10 | 1 | <10 | 2 | 9 | 6 |
| FEB. | | | | | | | | | |
| 08... | <.2 | .00 | <.2 | -- | -- | -- | -- | -- | -- |
| APR. | | | | | | | | | |
| 11... | -- | -- | -- | <10 | 0 | <10 | 0 | 9 | 1 |
| AUG. | | | | | | | | | |
| 03... | -- | -- | -- | <10 | 1 | <10 | 2 | 7 | 3 |
| SEP. | | | | | | | | | |
| 08... | <.8 | .06 | <.9 | -- | -- | -- | -- | -- | -- |

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## ST. FRANCIS RIVER BASIN

## 07047942 L'ANGUILLE RIVER NEAR COLT, ARK.--continued

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DIS-SOLVED LITHIUM (LI) (UG/L) | DIS-SOLVED MERCURY (HG) (UG/L) | DIS-SOLVED NICKEL (NI) (UG/L) | DIS-SOLVED SILVER (AG) (UG/L) | DIS-SOLVED ZINC (ZN) (UG/L) | DIS-SOLVED GROSS ALPHA AS U-NAT. (PC/L) | DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L) | SUS-PENDED GROSS ALPHA AS U-NAT. (PC/L) | SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L) |
|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | |
| 26... | 10 | .8 | 3 | 1 | 30 | -- | -- | -- | -- |
| DEC. | | | | | | | | | |
| 28... | -- | .5 | 2 | 0 | 40 | -- | -- | -- | -- |
| FEB. | | | | | | | | | |
| 08... | -- | -- | -- | -- | -- | 2.0 | 6.1 | 7.7 | 23 |
| APR. | | | | | | | | | |
| 11... | -- | <.5 | 2 | -- | 40 | -- | -- | -- | -- |
| AUG. | | | | | | | | | |
| 03... | -- | <.5 | 2 | 0 | 30 | -- | -- | -- | -- |
| SEP. | | | | | | | | | |
| 08... | -- | -- | -- | -- | -- | 1.0 | 3.0 | .8 | 2.4 |

| DATE | DIS-SOLVED GROSS BETA AS CS-137 (PC/L) | SUS-PENDED GROSS BETA AS CS-137 (PC/L) | DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L) | SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L) | DIS-SOLVED RA-226 (PLAN-CHET COUNT) (PC/L) | DIS-SOLVED RA-226 (RADON METHOD) (PC/L) | DIS-SOLVED NATURAL URANIUM (U) (UG/L) | DIS-SOLVED URANIUM (U) (UG/L) |
|---|---|---|---|---|---|---|---|---|
| FEB. | | | | | | | | |
| 08... | 14 | 15 | 11 | 12 | -- | .26 | <.4 | -- |
| SEP. | | | | | | | | |
| 08... | 11 | 1.5 | 8.5 | 1.3 | <.1 | -- | -- | .40 |

### FIELD ANALYSES

| DATE | INSTAN-TANEOUS DIS-CHARGE (CFS) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | DIS-SOLVED OXYGEN (MG/L) | PER-CENT SATUR-ATION |
|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | |
| 26... | 1.1 | 296 | 0 | 243 | 542 | 8.3 | 18.0 | -- | -- |
| NOV. | | | | | | | | | |
| 30... | 4.0 | -- | -- | -- | 600 | 7.8 | 6.5 | 9.7 | 80 |
| DEC. | | | | | | | | | |
| 28... | 86 | 88 | 0 | 72 | 222 | 7.0 | 12.5 | 7.3 | 68 |
| FEB. | | | | | | | | | |
| 08... | 235 | -- | -- | -- | 160 | -- | 3.0 | 11.8 | 87 |
| MAR. | | | | | | | | | |
| 07... | 665 | -- | -- | -- | -- | -- | -- | -- | -- |
| APR. | | | | | | | | | |
| 11... | 734 | -- | -- | -- | 128 | -- | 16.0 | 6.3 | 66 |
| MAY | | | | | | | | | |
| 16... | 265 | 60 | 0 | 49 | 141 | 7.0 | 20.5 | 6.5 | 50 |
| JUNE | | | | | | | | | |
| 22... | 25 | 256 | 0 | 210 | 518 | 7.8 | 24.5 | 5.6 | 67 |
| AUG. | | | | | | | | | |
| 03... | 108 | 226 | 0 | 186 | 466 | 7.9 | 27.0 | 5.3 | 66 |
| SEP. | | | | | | | | | |
| 08... | 453 | 152 | 0 | 125 | 295 | 7.6 | 24.5 | 5.2 | 62 |

< LESS THAN.

## 07047968 ST. FRANCIS RIVER NORTH OF HELENA, ARK.

LOCATION.--Lat 34°39'14", long 90°38'10", in sec.36, T.1 N., R.4 E., Lee County, at Phillips ferry crossing, 10 miles north of Helena.

PERIOD OF RECORD.--Chemical analyses: October 1971 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 25 | | | | | | 292 | | 8 | | |
| NOV. 10 | | | | | | 141 | | 4 | | |
| NOV. 22 | | | | | | 144 | | 3 | | |
| DEC. 8 | | | | | | 230 | | 8 | | |
| DEC. 20 | | | | 24.0 | 5.8 | 69 | 18 | 6 | 1.100 | 1.900 |
| JAN. 12 | | | | | | 92 | | 3 | | |
| JAN. 24 | | | | | | 28 | | 4 | | |
| FEB. 8 | | | | | | 105 | | 7 | | |
| FEB. 21 | | | | | | 53 | | 6 | | |
| MAR. 8 | | | | | | 54 | | 7 | | |
| MAR. 21 | | | | 27.0 | | 66 | | 7 | 0.400 | 0.120 |
| APR. 12 | | | | | | 86 | | 5 | | |
| APR. 26 | | | | | | 56 | | 4 | | |
| MAY 9 | | | | | | 67 | | 6 | | |
| MAY 22 | | | | | | 65 | | 3 | | |
| JUNE 14 | | | | | | 104 | | 8 | | |
| JUNE 27 | | 560 | 210.0 | 52.0 | 12.0 | 151 | 25 | 8 | 0.100K | 1.300 |
| JULY 12 | | | | | | 34 | | 6 | | |
| AUG. 9 | | | | | | 101 | | 7 | | |
| AUG. 23 | | | | | | 114 | | 5 | | |
| SEP. 13 | | | | | | 192 | | 8 | | |
| SEP. 26 | | 860 | 200.0 | 50.0 | | 77 | 16 | 9 | 0.300 | 0.160 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 25 | | | | | | 540 | 8.10 | 23.0 | | 40.0 |
| NOV. 10 | | | | | | 277 | 8.10 | 14.0 | | 25.0K |
| NOV. 22 | | | | | | 204 | 8.20 | 13.0 | | 30.0 |
| DEC. 8 | | | | | | 400 | 8.10 | 8.0 | | 25.0K |
| DEC. 20 | 203 | 23 | 226 | 84 | 60.0 | 166 | 7.40 | 13.0 | 100 | 95.0 |
| JAN. 12 | | | | | | 133 | 7.80 | 11.0 | | 45.0 |
| JAN. 24 | | | | | | 165 | 6.70 | 13.0 | | 200.0 |
| FEB. 8 | | | | | | 179 | 7.80 | 6.0 | | 55.0 |
| FEB. 21 | | | | | | 224 | 7.60 | 9.0 | | 210.0 |
| MAR. 8 | | | | | | 200 | 8.10 | 12.0 | | 190.0 |
| MAR. 21 | 51 | 162 | 213 | 100 | 68.0 | 175 | 7.60 | 8.0 | 70 | 95.0 |
| APR. 12 | | | | | | 214 | 7.80 | 20.0 | | 25.0K |
| APR. 26 | | | | | | 177 | 7.60 | 20.0 | | 25.0K |
| MAY 9 | | | | | | 142 | 7.00 | 20.0 | | 110.0 |
| MAY 22 | | | | | | 101 | 7.20 | 23.0 | | 30.0 |
| JUNE 14 | | | | | | 345 | 8.10 | 28.0 | | 62.0 |
| JUNE 27 | 217 | 39 | 256 | 180 | 130.0 | 313 | | 28.0 | 30 | 70.0 |
| JULY 12 | | | | | | 167 | | 29.0 | | 270.0 |
| AUG. 9 | | | | | | 188 | 6.90 | 25.0 | | 50.0 |
| AUG. 23 | | | | | | 263 | 6.50 | 27.0 | | 11.0 |
| SEP. 13 | | | | | | 363 | 7.70 | 28.0 | | 205.0 |
| SEP. 26 | 19 | 228 | 247 | 186 | 126.0 | 393 | 7.00 | 27.0 | 20 | 29.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MPN-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 25 | 7.6 | | 3.0 | | | |
| NOV. 10 | 6.8 | | 2.4 | | | |
| NOV. 22 | 9.5 | | 2.4 | | | |
| DEC. 8 | 10.8 | | 2.7 | | | |
| DEC. 20 | 7.6 | | 4.1 | | | |
| JAN. 12 | 11.0 | | 2.1 | | | |
| JAN. 24 | 11.0 | | 2.8 | | | |
| FEB. 8 | 11.7 | | 3.7 | | | |
| FEB. 21 | 10.7 | | 3.6 | | | |
| MAR. 8 | 8.7 | | 5.7 | | | |
| MAR. 21 | 8.6 | | 3.2 | | | |
| APR. 12 | 8.8 | | 3.8 | | | |
| APR. 26 | 7.9 | | 4.4 | | | |
| MAY 9 | 4.5 | | 3.4 | | | |
| MAY 22 | 4.3 | | 2.5 | | | |
| JUNE 14 | 7.1 | | 4.4 | | | |
| JUNE 27 | 5.4 | | 2.3 | 70 | 3050 | 65 |
| JULY 12 | 6.8 | 87.0 | 5.6 | | | |
| AUG. 9 | 6.3 | | 5.9 | | | |
| AUG. 23 | 4.5 | | 5.7 | | | |
| SEP. 13 | 7.3 | | 3.1 | | | |
| SEP. 26 | 6.0 | | 2.9 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JUNE 27 | | 2K | 200K | | 10K | 100K | 2.0K | 30K | 13 |
| SEP. 26 | 10K | 2K | 50K | | 10K | 100K | 0.2K | 50K | 12 |

K Less than.

## 07047970 MISSISSIPPI RIVER AT HELENA, ARK.

LOCATION.--Lat 34°31'26", long 90°35'02", Phillips County, at gaging station on right bank at railroad ferry landing at Helena, 10 miles downstream from St. Francis River, and at mile 666.3 (1962 adjustment).

DRAINAGE AREA.--941,700 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 25 | 337000 | | | | | 125 | | 17 | | |
| NOV. 10 | 645000 | | | | | 168 | | 35 | | |
| NOV. 22 | 419000 | | | | | 171 | | 6 | | |
| DEC. 8 | 296000 | | | | | 112 | | 21 | | |
| DEC. 20 | 339300 | | | 36.0 | 14.0 | 87 | 63 | 21 | 0.800 | 1.000 |
| JAN. 12 | 709000 | | | | | 58 | | 3 | | |
| JAN. 24 | 615000 | | | | | 114 | | 5 | | |
| FEB. 8 | 517300 | | | | | 75 | | 14 | | |
| FEB. 21 | 484300 | | | | | 58 | | 20 | | |
| MAR. 8 | 895000 | | | | | 84 | | 16 | | |
| MAR. 21 | 886000 | | | 35.2 | 11.1 | 85 | 47 | 10 | 1.100 | 0.120 |
| APR. 12 | 583000 | | | | | 111 | | 5 | | |
| APR. 26 | 1048000 | | | | | 75 | | 5 | | |
| MAY 9 | 1083000 | | | | | 83 | | 11 | | |
| MAY 22 | 789000 | | | | | 98 | | 3 | | |
| JUNE 13 | 513000 | | | | | 125 | | 17 | | |
| JUNE 27 | 342000 | 1325 | 270.0 | 52.0 | 12.0 | 11 | 96 | 17 | 1.400 | 1.300 |
| JULY 12 | 411200 | | | | | 82 | | 14 | | |
| JULY 26 | | | | | | 161 | | 16 | | |
| AUG. 9 | 403000 | | | | | 102 | | 17 | | |
| AUG. 23 | 354000 | | | | | 131 | | 5 | | |
| SEP. 13 | 272300 | | | | | 126 | | 6 | | |
| SEP. 16 | 271300 | | | | | | | | | |
| SEP. 26 | | 2020 | 290.0 | 40.0 | | 67 | 10 | 15 | 0.750 | 0.190 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 25 | | | | | | 450 | 8.10 | 21.0 | | 55.0 |
| NOV. 10 | | | | | | 294 | 8.40 | 12.0 | | 25.0K |
| NOV. 22 | | | | | | 238 | 8.50 | 14.0 | | 25.0K |
| DEC. 8 | | | | | | 384 | 8.10 | 7.0 | | 100.0 |
| DEC. 20 | 259 | 157 | 416 | 148 | 90.0 | 357 | 7.00 | 11.0 | 30 | 100.0 |
| JAN. 12 | | | | | | 166 | 7.90 | 10.0 | | 45.0 |
| JAN. 24 | | | | | | 166 | 7.00 | 10.0 | | 40.0 |
| FEB. 8 | | | | | | 200 | 8.30 | 5.0 | | 260.0 |
| FEB. 21 | | | | | | 338 | 7.70 | 8.0 | | 85.0 |
| MAR. 8 | | | | | | 256 | 8.40 | 9.0 | | 350.0 |
| MAR. 21 | 216 | 100 | 396 | 134 | 88.0 | 255 | 7.50 | 12.0 | 20 | 150.0 |
| APR. 12 | | | | | | 256 | 8.10 | 18.0 | | 65.0 |
| APR. 26 | | | | | | 164 | 7.30 | 18.0 | | 30.0 |
| MAY 9 | | | | | | 249 | 7.20 | 18.0 | | 100.0 |
| MAY 22 | | | | | | 145 | 7.00 | 22.0 | | 35.0 |
| JUNE 13 | | | | | | 403 | 8.10 | 26.0 | | 75.0 |
| JUNE 27 | 292 | 181 | 473 | 180 | 120.0 | 305 | 8.00 | 27.0 | 40 | 220.0 |
| JULY 12 | | | | | | 313 | | 26.0 | | 100.0 |
| JULY 26 | | | | | | 321 | 8.00 | 28.0 | | 60.0 |
| AUG. 9 | | | | | | 260 | 7.10 | 29.0 | | 30.0 |
| AUG. 23 | | | | | | 225 | 8.30 | 28.0 | | 25.0 |
| SEP. 13 | | | | | | 357 | 7.90 | 28.0 | | 120.0 |
| SEP. 26 | 223 | 267 | 490 | 146 | 100.0 | 369 | 7.00 | 28.0 | 60 | 117.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MF M-FCBR /100ML | TOT COLI MF IMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 25 | 9.3 | | 7.6 | | | |
| NOV. 10 | 10.6 | | 1.7 | | | |
| NOV. 22 | 11.7 | | 5.0 | | | |
| DEC. 8 | 11.3 | | 4.2 | | | |
| DEC. 20 | 9.9 | | 1.4 | 340 | 4600 | 367 |
| JAN. 12 | 11.5 | | 3.1 | | | |
| JAN. 24 | 11.9 | | 3.1 | | | |
| FEB. 8 | 12.3 | | 4.0 | | | |
| FEB. 21 | 12.3 | | 4.6 | | | |
| MAR. 8 | 10.9 | | 4.7 | | | |
| MAR. 21 | 9.1 | | 2.3 | 833 | 6800 | 56 |
| APR. 12 | 9.6 | | 3.5 | | | |
| APR. 26 | 6.2 | | 4.0 | | | |
| MAY 9 | 7.3 | | 4.7 | | | |
| MAY 22 | 6.1 | | 4.1L | | | |
| JUNE 13 | 5.9 | | 2.4 | | | |
| JUNE 27 | 5.5 | | 2.7 | | 21800 | 167 |
| JULY 12 | 7.4 | 90.0 | 1.7 | | | |
| JULY 26 | 6.5 | 108.0 | 2.5 | | | |
| AUG. 9 | 7.9 | 101.0 | 1.5 | | | |
| AUG. 23 | 7.9 | 98.0 | 2.5 | | | |
| SEP. 13 | 7.3 | 92.0 | 3.6 | | | |
| SEP. 26 | 7.0 | 85.0 | 2.7 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JUNE 27 | | 2K | 100K | | 10K | 100K | 2.0K | 30K | 22 |
| SEP. 26 | 10K | 2K | 50K | | 22 | 100K | 0.1K | 50K | 23 |

K Less than.
L Greater than.

## 07048700 WHITE RIVER NEAR GOSHEN, ARK.

LOCATION.--Lat 36°06'22", long 94°00'41", in NE¼NW¼ sec.31, T.17 N., R.28 W., Washington County, at bridge on State Highway 45, 0.2 mile upstream from Richland Creek, and 1.2 miles west of Goshen.

DRAINAGE AREA.--408 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1972.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DIS-SOLVED IRON (FE) (UG/L) | DIS-SOLVED MAN-GANESE (MN) (UG/L) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | DIS-SOLVED SULFATE (SO4) (MG/L) | DIS-SOLVED CHLO-RIDE (CL) (MG/L) | DIS-SOLVED NITRATE (N) (MG/L) | TOTAL PHOS-PHORUS (P) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|
| NOV. 03... | -- | -- | 166 | 0 | 136 | 24 | 33 | .60 | 1.3 |
| DEC. 08... | -- | -- | 56 | 0 | 46 | 16 | 6.3 | .27 | .48 |
| JAN. 12... | 20 | 70 | 44 | 0 | 36 | 7.2 | 3.9 | .50 | .27 |
| FEB. 16... | -- | -- | 42 | 0 | 34 | 13 | 11 | .36 | .14 |
| MAR. 15... | -- | -- | 46 | 0 | 38 | 17 | 11 | .60 | .41 |
| APR. 19... | -- | -- | 33 | 0 | 27 | 9.2 | 4.1 | .25 | .20 |
| MAY 24... | -- | -- | 58 | 0 | 48 | 20 | 12 | .25 | .23 |
| JUNE 06... | -- | -- | 76 | 0 | 62 | 16 | 11 | 1.2 | .58 |
| 28... | -- | -- | 128 | 0 | 105 | 51 | 9.6 | 1.1 | 2.7 |
| AUG. 02... | -- | -- | 76 | 0 | 62 | 18 | 26 | 1.2 | .70 |
| SEP. 06... | -- | -- | 176 | 0 | 144 | 31 | 33 | 2.2 | 2.1 |

| DATE | HARD-NESS (CA,MG) (MG/L) | NON-CAR-BONATE HARD-NESS (MG/L) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) | BIO-CHEM-ICAL OXYGEN DEMAND (MG/L) | IMME-DIATE COLI-FORM (COL. PER 100 ML) | FECAL COLI-FORM (COL. PER 100 ML) | STREP-TOCOCCI (COL-ONIES PER 100 ML) |
|---|---|---|---|---|---|---|---|---|---|
| NOV. 03... | 170 | 37 | 440 | 7.5 | 21 | 2.7 | E30000 | E3000 | E72 |
| DEC. 08... | 54 | 8 | 137 | 7.1 | 7 | 6.3 | >8000 | E2600 | E430 |
| JAN. 12... | 42 | 6 | 106 | 7.3 | 7 | 2.6 | E220 | E47 | E12 |
| FEB. 16... | 38 | 4 | 95 | 7.6 | 6 | 2.3 | 250 | <7 | -- |
| MAR. 15... | 44 | 6 | 121 | 7.6 | 4 | 3.6 | 1000 | E70 | 20 |
| APR. 19... | 30 | 3 | 71 | 6.9 | 9 | 4.9 | E17000 | E1700 | 200 |
| MAY 24... | 58 | 10 | 152 | 7.1 | 9 | 3.4 | E1000 | E52 | 160 |
| JUNE 06... | 68 | 6 | 201 | 7.7 | 20 | 2.6 | 400 | -- | 46 |
| 28... | 100 | 0 | 354 | 7.3 | 23 | -- | E1300 | 820 | E700 |
| AUG. 02... | 66 | 4 | 201 | 7.6 | 8 | 4.6 | 580 | -- | 160 |
| SEP. 06... | 120 | 0 | 458 | 7.6 | 11 | 3.3 | E120 | E33 | 240 |

| DATE | DIS-SOLVED ARSENIC (AS) (UG/L) | DIS-SOLVED CAD-MIUM (CD) (UG/L) | HEXA-VALENT CHRO-MIUM (CR6) (UG/L) | DIS-SOLVED COBALT (CO) (UG/L) | DIS-SOLVED COPPER (CU) (UG/L) | DIS-SOLVED LEAD (PB) (UG/L) | TOTAL MERCURY (HG) (UG/L) | DIS-SOLVED MERCURY (HG) (UG/L) | DIS-SOLVED NICKEL (NI) (UG/L) | DIS-SOLVED SILVER (AG) (UG/L) | DIS-SOLVED ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DEC. 08... | -- | -- | -- | -- | -- | -- | <.5 | <.5 | -- | -- | -- |
| JAN. 12... | <10 | 0 | <10 | 2 | 2 | 0 | -- | <.5 | 2 | 0 | 10 |

> GREATER THAN.
< LESS THAN.
E ESTIMATED.

## 07048700 WHITE RIVER NEAR GOSHEN, ARK.--continued

### FIELD ANALYSES

| DATE | BICARBONATE (HCO3) (MG/L) | CARBONATE (CO3) (MG/L) | ALKALINITY AS CACO3 (MG/L) | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | DISSOLVED OXYGEN (MG/L) | PERCENT SATURATION |
|---|---|---|---|---|---|---|---|---|
| NOV. | | | | | | | | |
| 03... | 160 | 0 | 131 | 440 | 7.6 | 14.0 | 3.7 | 36 |
| DEC. | | | | | | | | |
| 08... | -- | -- | -- | 140 | 6.8 | 6.5 | 9.6 | 79 |
| JAN. | | | | | | | | |
| 12... | 42 | 0 | 34 | 109 | 7.7 | 6.0 | 10.8 | 87 |
| FEB. | | | | | | | | |
| 16... | 56 | 0 | 46 | 106 | 7.8 | 6.0 | 10.6 | 85 |
| MAR. | | | | | | | | |
| 15... | -- | -- | -- | 131 | 6.6 | 14.0 | 8.8 | 85 |
| APR. | | | | | | | | |
| 19... | 32 | 0 | 26 | 77 | 7.3 | 17.5 | 8.9 | 93 |
| MAY | | | | | | | | |
| 24... | 58 | 0 | 48 | 167 | 6.6 | 22.0 | 4.3 | 49 |
| JUNE | | | | | | | | |
| 06... | 76 | 0 | 62 | 203 | 7.5 | 26.0 | -- | -- |
| 28... | 116 | 0 | 95 | 380 | 6.8 | 25.5 | 4.7 | 57 |
| AUG. | | | | | | | | |
| 02... | 68 | 0 | 56 | 175 | 6.9 | 25.0 | 4.0 | 48 |
| SEP. | | | | | | | | |
| 06... | -- | -- | -- | -- | 7.3 | 21.0 | 3.1 | 34 |

## 07049691 WHITE RIVER AT BEAVER DAM, NEAR EUREKA SPRINGS, ARK.

LOCATION.--Lat 36°25'15", long 93°50'50", in NW¼NW¼ sec.10, T.20 N., R.27 W., Carroll County, at gaging station at Beaver Dam, 6.0 miles west of Eureka Springs, and at mile 609.0.

DRAINAGE AREA.--1,186 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1945 to September 1946, October 1949 to September 1953, October 1967 to September 1972.
Water temperatures: October 1945 to September 1946, October 1949 to September 1953, October 1967 to September 1972.

REMARKS.--Flow completely regulated by Beaver Reservoir. Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark. Additional records furnished by Corps of Engineers, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGANESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| NOV. 1 | | | | | | 62 | | 3 | | |
| NOV. 15 | | | | | | 60 | | 3 | | |
| DEC. 13 | | | | | | 56 | | 3 | | |
| JAN. 24 | | 100K | 100.0K | 20.8 | 3.9 | 59 | 1K | 4 | 0.100K | 0.100 |
| JAN. 31 | | | | | | 61 | | 2 | | |
| FEB. 14 | | | | | | 58 | | 3 | | |
| MAR. 13 | | | | | | 59 | | 4 | | |
| MAR. 28 | | | | | | 59 | | 3 | | |
| APR. 4 | | | | 25.6 | 3.9 | 57 | 2 | 3 | 0.200 | 0.120 |
| APR. 18 | | | | | | 55 | | 2 | | |
| MAY 1 | | | | | | 54 | | 3 | | |
| MAY 15 | | | | | | 62 | | | | |
| MAY 30 | | | | | | 61 | | 4 | | |
| JUNE 19 | | | | | | 55 | | 3 | | |
| JULY 4 | | 625 | 180.0 | 26.0 | 1.0 | 58 | 6 | 5 | 1.700 | 0.050 |
| JULY 18 | | | | | | 60 | | 5 | | |
| JULY 31 | | | | | | 60 | | 4 | | |
| AUG. 21 | | | | | | 59 | | 3 | | |
| AUG. 29 | | | | | | 61 | | 4 | | |
| SEP. 18 | | | | | | 58 | | 4 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| NOV. 1 | | | | | | 121 | 7.80 | 18.0 | | 25.0K |
| NOV. 15 | | | | | | 106 | 7.80 | 15.5 | | 25.0K |
| DEC. 13 | | | | | | 131 | 7.70 | 10.0 | | 25.0K |
| JAN. 24 | 69 | 13 | 82 | 68 | 52.0 | 111 | 7.60 | 8.0 | 5 | 25.0K |
| JAN. 31 | | | | | | 113 | 7.50 | 8.0 | | 25.0K |
| FEB. 14 | | | | | | 125 | 7.70 | 7.0 | | 25.0K |
| MAR. 13 | | | | | | 103 | 7.60 | 9.0 | | 25.0K |
| MAR. 28 | | | | | | 95 | 7.40 | 8.0 | | 25.0K |
| APR. 4 | 86 | 18 | 104 | 80 | 64.0 | 129 | 7.90 | 10.0 | 5 | 25.0K |
| APR. 18 | | | | | | 122 | 8.00 | 16.0 | | 25.0K |
| MAY 1 | | | | | | 99 | 7.20 | 16.0 | | 25.0K |
| MAY 15 | | | | | | | | | | 25.0K |
| MAY 30 | | | | | | 118 | 7.90 | 17.0 | | 25.0K |
| JUNE 19 | | | | | | 128 | 8.70 | 26.5 | | 25.0K |
| JULY 4 | 72 | 14 | 86 | 70 | 66.0 | 119 | 8.50 | 24.0 | 0 | 25.0K |
| JULY 18 | | | | | | 118 | 8.20 | 28.0 | | 25.0K |
| JULY 31 | | | | | | 112 | 8.40 | 25.0 | | 25.0K |
| AUG. 21 | | | | | | 143 | 8.60 | 30.0 | | 7.0 |
| AUG. 29 | | | | | | 156 | 8.50 | 25.0 | | 6.0 |
| SEP. 18 | | | | | | 116 | 8.60 | 26.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| NOV. 1 | 9.1 | | 2.1 | | | |
| NOV. 15 | 9.0 | | 1.0 | | | |
| DEC. 13 | 9.0 | | 1.5 | | | |
| JAN. 24 | 9.3 | | 1.0 | | | |
| JAN. 25 | | | | 4K | 4K | 4K |
| JAN. 31 | 9.7 | | 1.4 | | | |
| FEB. 14 | 10.5 | | 1.5 | | | |
| MAR. 13 | 10.7 | | 1.1 | | | |
| MAR. 28 | 10.5 | | 0.6 | | | |
| APR. 4 | 10.6 | | 1.1 | | | |
| APR. 18 | 8.9 | | 0.3 | | | |
| MAY 1 | 10.1 | | 1.9 | | | |
| MAY 15 | 9.7 | | 1.7 | | | |
| MAY 30 | 11.6 | | 2.3 | | | |
| JUNE 19 | 9.0 | | 1.6 | | | |
| JULY 4 | 8.6 | 101.0 | 0.8 | 4K | 10 | 4K |
| JULY 18 | 9.5 | 120.0 | 2.1 | | | |
| JULY 31 | 9.3 | 114.0 | 2.6 | | | |
| AUG. 21 | 10.4 | | 4.7 | | | |
| AUG. 29 | 8.7 | | 1.7 | | | |
| SEP. 18 | 9.3 | | 2.4 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JULY 4 | | 2K | 100K | | 75 | 100K | | 90 | 42 |
| SEP. 18 | | | | | | | | | |

K Less than.

## 07049691 WHITE RIVER AT BEAVER DAM, NEAR EUREKA SPRINGS, ARK.--continued

### ADDITIONAL CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

|  | JANUARY |  |  | FEBRUARY |  |  | MARCH |  |  |
|---|---|---|---|---|---|---|---|---|---|
| DAY | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) |
| 1 | -- | -- | -- | 10.0 | 7.2 | 160 | -- | -- | -- |
| 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 3 | -- | -- | -- | -- | -- | -- | 10.0 | 6.4 | 160 |
| 4 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 5 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 6 | 1.3 | 8.2 | 150 | -- | -- | -- | -- | -- | -- |
| 7 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 8 | -- | -- | -- | 10.8 | 6.7 | 157 | -- | -- | -- |
| 9 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11 | 5.2 | 8.4 | 159 | 10.6 | 6.6 | 159 | -- | -- | -- |
| 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 13 | 7.9 | 8.5 | 157 | -- | -- | -- | -- | -- | -- |
| 14 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 15 | -- | -- | -- | 10.6 | 6.7 | 161 | -- | -- | -- |
| 16 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 17 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 18 | 9.6 | 7.8 | 156 | 10.9 | 6.8 | 162 | -- | -- | -- |
| 19 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 20 | 10.4 | 7.7 | 154 | -- | -- | -- | -- | -- | -- |
| 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 22 | -- | -- | -- | 10.9 | 6.5 | 163 | -- | -- | -- |
| 23 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 25 | -- | -- | -- | 10.3 | 6.6 | 160 | -- | -- | -- |
| 26 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 27 | 10.0 | 7.6 | 155 | -- | -- | -- | -- | -- | -- |
| 28 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 29 | -- | -- | -- | 10.8 | 6.6 | 150 | 10.0 | 6.7 | -- |
| 30 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 31 | -- | -- | -- | -- | -- | -- | -- | -- | -- |

|  | APRIL |  |  | MAY |  |  | JUNE |  |  |
|---|---|---|---|---|---|---|---|---|---|
| DAY | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) |
| 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 2 | -- | -- | -- | -- | -- | -- | 7.6 | 7.1 | 164 |
| 3 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 4 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 5 | 10.3 | 6.7 | 166 | 9.2 | 6.9 | 144 | -- | -- | -- |
| 6 | -- | -- | -- | -- | -- | -- | 7.6 | 7.1 | 167 |
| 7 | 10.0 | 6.6 | 162 | -- | -- | -- | -- | -- | -- |
| 8 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 9 | -- | -- | -- | 10.3 | 6.9 | 165 | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11 | 11.1 | 6.7 | 166 | -- | -- | -- | -- | -- | -- |
| 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 13 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 14 | 10.4 | 6.9 | 163 | -- | -- | -- | -- | -- | -- |
| 15 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 16 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 17 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 18 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 19 | -- | -- | -- | 10.0 | 7.1 | 165 | -- | -- | -- |
| 20 | 9.5 | 7.1 | 165 | -- | -- | -- | -- | -- | -- |
| 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 22 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 23 | -- | -- | -- | -- | -- | -- | 7.3 | 7.2 | 167 |
| 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 25 | 9.5 | 6.8 | 166 | 7.9 | 7.0 | 164 | -- | -- | -- |
| 26 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 27 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 28 | -- | -- | -- | -- | -- | -- | 6.2 | 7.2 | -- |
| 29 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 30 | -- | -- | -- | -- | -- | -- | 7.1 | 7.3 | -- |
| 31 | -- | -- | -- | -- | -- | -- | -- | -- | -- |

## 07049691 WHITE RIVER AT BEAVER DAM, NEAR EUREKA SPRINGS, ARK.--continued

## ADDITIONAL CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| | JULY | | | AUGUST | | | SEPTEMBER | | |
|---|---|---|---|---|---|---|---|---|---|
| DAY | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) |
| 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 3 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 4 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 5 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 6 | 6.8 | 7.2 | -- | -- | -- | -- | -- | -- | -- |
| 7 | -- | -- | -- | -- | -- | -- | 3.9 | 7.7 | -- |
| 8 | -- | -- | -- | 4.6 | 7.3 | -- | -- | -- | -- |
| 9 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11 | 6.1 | 7.2 | -- | 3.7 | 7.4 | -- | -- | -- | -- |
| 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 13 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 14 | 6.1 | 7.3 | -- | -- | -- | -- | -- | -- | -- |
| 15 | -- | -- | -- | 4.2 | 7.3 | -- | -- | -- | -- |
| 16 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 17 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 18 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 19 | 8.5 | 7.1 | -- | -- | -- | -- | -- | -- | -- |
| 20 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21 | 6.2 | 7.2 | -- | -- | -- | -- | -- | -- | -- |
| 22 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 23 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 25 | 6.0 | 7.1 | -- | -- | -- | -- | -- | -- | -- |
| 26 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 27 | 6.0 | 7.2 | -- | -- | -- | -- | -- | -- | -- |
| 28 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 29 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 30 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 31 | -- | -- | -- | -- | -- | -- | -- | -- | -- |

## 07050500 KINGS RIVER NEAR BERRYVILLE, ARK.

LOCATION.--Lat 36°25'36", long 93°37'15", in SE¼NE¼ sec.3, T.20 N., R.25 W., Carroll County, at gaging station on right bank at downstream side of bridge on State Highway 143, 1.5 miles downstream from Bee Creek, 2.5 miles upstream from Clabber Creek, 5.3 miles northwest of Berryville, and at mile 35.1.

DRAINAGE AREA.--532 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1953 to September 1960, October 1971 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| NOV. 1 | 19 | | | | | 148 | | 5 | | |
| NOV. 15 | 22 | | | | | 157 | | 5 | | |
| DEC. 13 | 1220 | | | | | | | 2 | | |
| JAN. 24 | 107 | 100K | 1C0.0K | 33.6 | 8.7 | 113 | 2 | 2 | 0.100 | 5.500 |
| JAN. 31 | 105 | | | | | 113 | | 3 | | |
| FEB. 14 | 204 | | | | | 1C7 | | 3 | | |
| MAR. 13 | 76 | | | | | 104 | | 6 | | |
| MAR. 28 | 122 | | | | | 116 | | 4 | | |
| APR. 4 | 148 | | | 37.6 | 4.8 | 94 | 5 | 3 | C.100 | C.120 |
| APR. 18 | 1080 | | | | | 71 | | | | |
| MAY 1 | 1080 | | | | | 5E | | 2 | | |
| MAY 15 | 225 | | | | | 104 | | 3 | | |
| MAY 30 | 66 | | | | | | | 4 | | |
| JUNE 19 | 29 | | | | | 14E | | | | |
| JULY 4 | -- | 350 | 210.0 | 36.0 | 7.8 | 105 | 7 | 5 | 1.200 | C.490 |
| JULY 18 | 160 | | | | | 118 | | 4 | | |
| JULY 31 | 31 | | | | | 133 | | 4 | | |
| AUG. 21 | 7.6 | | | | | 141 | | 5 | | |
| AUG. 29 | 21 | | | | | 133 | | 6 | | |
| SEP. 18 | 5.6 | | | | | 111 | | 6 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| NOV. 1 | | | | | | 263 | 8.30 | 17.0 | | 25.0K |
| NOV. 15 | | | | | | 241 | 8.10 | 12.0 | | 25.0K |
| DEC. 13 | | | | | | 161 | 7.9C | | | |
| JAN. 24 | 142 | 4 | 146 | 120 | 84.0 | 185 | 8.10 | 9.0 | 5 | 25.0K |
| FAN. 31 | | | | | | 192 | 8.50 | 4.0 | | 25.0K |
| FEB. 14 | | | | | | 204 | 8.20 | 7.0 | | 25.0K |
| MAR. 13 | | | | | | 178 | 8.50 | 12.0 | | 25.0K |
| MAR. 28 | | | | | | 161 | 7.6C | 12.0 | | 25.0K |
| APR. 4 | 129 | 15 | 144 | 114 | 54.0 | 200 | 8.20 | 10.0 | 5 | 25.0K |
| APR. 18 | | | | | | | | | | 25.0K |
| MAY 1 | | | | | | 196 | 7.4C | 17.0 | | 25.0K |
| MAY 15 | | | | | | 179 | 7.70 | | | 25.0K |
| MAY 30 | | | | | | 2C8 | 7.90 | 20.0 | | |
| JUNE 19 | | | | | | | | | | 25.0K |
| JULY 4 | 114 | 93 | 207 | 122 | 90.0 | 204 | 8.00 | 12.0 | 20 | 60.0 |
| JULY 18 | | | | | | 2C2 | 8.0C | 26.0 | | 25.0K |
| JULY 31 | | | | | | 198 | 8.80 | 26.0 | | 25.0K |
| AUG. 21 | | | | | | 288 | 8.00 | 27.5 | | 10.0 |
| AUG. 29 | | | | | | 244 | 8.20 | 19.0 | | 10.0 |
| SEP. 18 | | | | | | 285 | 7.20 | 28.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDC /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| NOV. 1 | 11.5 | | 2.5 | | | |
| NOV. 15 | 9.7 | | 0.7 | | | |
| JAN. 24 | 11.0 | | | | | |
| JAN. 25 | | | | 4K | 4K | 7 |
| JAN. 31 | 14.3 | | 2.9 | | | |
| FEB. 14 | 11.6 | | 1.9 | | | |
| MAR. 13 | 10.3 | | 2.C | | | |
| MAR. 28 | 8.4 | | 0.5 | | | |
| APR. 4 | 10.6 | | 1.1 | | | |
| APR. 18 | 8.4 | | 3.9 | | | |
| MAY 1 | 8.9 | | 1.5 | | | |
| MAY 15 | 8.9 | | 1.8 | | | |
| JUNE 19 | 8.3 | | 3.4 | | | |
| JULY 4 | 7.6 | 70.0 | 1.1 | 160 | 152C | 143 |
| JULY 18 | 8.1 | 99.C | 2.7 | | | |
| JULY 31 | 11.7 | 143.0 | 4.4 | | | |
| AUG. 21 | 5.9 | | 1.1 | | | |
| AUG. 29 | 7.5 | | 1.5 | | | |
| SEP. 18 | 11.2 | | 5.2 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JULY 4 | | 2 | 10CK | | 250 | 1C0K | | 120 | 800 |

K Less than.

## 07054500 BULL SHOALS LAKE NEAR FLIPPIN, ARK.

LOCATION.--Lat 36°21'56", long 92°34'29", in NW¼ sec.21, T.20 N., R.15 W., Marion County, at dam on White River, 6.3 miles northeast of Flippin, 12.5 miles downstream from Little North Fork, and at mile 418.6.

DRAINAGE AREA.--6,036 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1956 to September 1969, October 1970 to September 1972.

REMARKS.--Records furnished (for log boom location about 1,000 ft upstream from dam) by Corps of Engineers, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| | FEBRUARY 10 | | APRIL 4 | | MAY 8 | | JUNE 6 | |
|---|---|---|---|---|---|---|---|---|
| DEPTH (FEET) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS |
| 0 | 7.5 | 272 | 12.0 | 255 | 18.0 | 252 | 27.0 | 220 |
| 5 | 7.5 | 272 | 11.5 | 255 | 18.0 | 252 | 25.5 | 230 |
| 10 | 7.5 | 272 | 10.5 | 265 | 18.0 | 252 | 24.0 | 230 |
| 15 | 7.5 | 272 | 10.5 | 265 | 17.5 | 260 | 22.5 | 230 |
| 20 | 7.5 | 272 | 10.5 | 265 | 17.5 | 258 | 22.0 | 225 |
| 25 | 7.5 | 272 | 10.0 | 270 | 17.0 | 260 | 19.5 | 232 |
| 30 | 7.5 | 272 | 9.5 | 275 | 17.0 | 260 | 17.5 | 240 |
| 35 | 7.5 | 272 | 10.0 | 270 | 16.5 | 260 | 16.5 | 240 |
| 40 | 7.5 | 272 | 9.5 | 275 | 16.0 | 260 | 15.0 | 245 |
| 45 | 7.5 | 272 | -- | -- | -- | -- | 14.0 | 250 |
| 50 | 7.5 | 272 | 10.0 | 270 | 13.5 | 265 | 13.5 | 250 |
| 55 | -- | -- | -- | -- | -- | -- | 13.0 | 250 |
| 60 | 7.5 | 272 | 10.0 | 270 | 12.0 | 270 | 13.0 | 245 |
| 65 | -- | -- | -- | -- | -- | -- | 11.5 | 253 |
| 70 | 7.5 | 272 | 9.5 | 272 | 11.0 | 270 | 11.0 | 253 |
| 80 | -- | -- | 9.5 | 270 | 10.0 | 272 | 10.0 | 258 |
| 90 | 7.5 | 272 | 8.0 | 280 | -- | -- | 10.0 | 254 |
| 100 | -- | -- | 8.0 | 275 | 9.0 | 270 | 8.5 | 260 |
| 110 | 7.5 | 272 | 7.5 | 275 | -- | -- | -- | -- |
| 120 | -- | -- | 7.5 | 275 | 7.5 | 277 | 8.0 | 255 |
| 130 | 7.5 | 272 | 7.0 | 280 | -- | -- | -- | -- |
| 140 | -- | -- | 6.0 | 292 | 7.0 | 280 | 7.0 | 262 |
| 150 | 7.5 | 272 | 6.5 | 285 | -- | -- | -- | -- |
| 160 | -- | -- | 7.0 | 285 | 7.0 | 280 | 7.0 | 263 |
| 170 | 7.3 | 270 | -- | -- | -- | -- | -- | -- |
| 180 | 7.3 | 270 | 7.0 | 285 | 7.0 | 280 | 7.0 | 265 |

| | AUGUST 2 | | AUGUST 15 | | | AUGUST 30 | | |
|---|---|---|---|---|---|---|---|---|
| DEPTH (FEET) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) |
| 0 | 29.0 | 240 | 7.4 | 30.0 | 270 | 8.0 | 28.5 | 245 |
| 5 | 28.5 | 240 | -- | -- | -- | -- | -- | -- |
| 10 | -- | -- | 7.6 | 28.5 | 255 | 7.7 | 28.5 | 245 |
| 15 | 28.0 | 243 | -- | -- | -- | -- | -- | -- |
| 20 | 26.5 | 243 | 8.2 | 28.0 | 250 | 7.8 | 28.3 | 245 |
| 25 | 25.0 | 240 | -- | -- | -- | -- | -- | -- |
| 30 | 21.5 | 240 | 7.7 | 25.0 | 240 | 12.0 | 26.3 | 240 |
| 35 | 21.0 | 240 | -- | -- | -- | 12.9 | 22.0 | 220 |
| 40 | 18.0 | 240 | 7.5 | 19.3 | 220 | 9.3 | 19.5 | 220 |
| 50 | 16.0 | 240 | 7.4 | 17.0 | 220 | 6.8 | 17.8 | 220 |
| 60 | 14.5 | 270 | 4.1 | 15.0 | 215 | 3.3 | 15.5 | 220 |
| 70 | 13.0 | 275 | 3.3 | 14.0 | 210 | 2.8 | 14.5 | 215 |
| 80 | 13.0 | 270 | 3.7 | 12.8 | 205 | 2.8 | 13.0 | 210 |
| 90 | -- | -- | 4.2 | 11.5 | 195 | 3.5 | 12.0 | 195 |
| 100 | 10.5 | 272 | 4.4 | 10.5 | 190 | 4.1 | 11.0 | 190 |
| 110 | -- | -- | 4.3 | 9.8 | 185 | -- | -- | -- |
| 120 | 9.0 | 274 | 4.0 | 9.0 | 180 | 3.8 | 9.2 | 180 |
| 130 | -- | -- | 3.7 | 8.5 | 180 | -- | -- | -- |
| 140 | 8.0 | -- | 3.2 | 8.0 | 175 | 2.8 | 8.2 | 175 |
| 150 | -- | -- | 2.4 | 7.8 | 175 | -- | -- | -- |
| 160 | 7.5 | -- | 1.7 | 7.5 | 175 | 1.4 | 8.0 | 170 |
| 165 | -- | -- | -- | -- | -- | .9 | 7.9 | 170 |
| 180 | 7.5 | -- | -- | -- | -- | -- | -- | -- |

## 07055500 WHITE RIVER AT COTTER, ARK.

LOCATION.--Lat 36°16', long 92°33', in NW¼NW¼ sec.26, T.19 N., R.15 W., Marion County, temperature recorder on right bank, 100 yards downstream from bridge on U.S. Highway 62, 2 miles southwest of Cotter, 3.3 miles downstream from Hightower Creek, and 17 miles downstream from Bull Shoals Dam.

DRAINAGE AREA.--6,115 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1947 to July 1959.
Water temperatures: October 1947 to July 1959, October 1966 to September 1972.

EXTREMES.--Current year:
Water temperatures: Maximum, 22.0°C May 25; minimum, 2.0°C Jan. 31.

Period of record:
Water temperatures (1951-59, 1966-72): Maximum, 26.0°C Sept. 20, 1954; minimum, freezing point Feb. 8, 1971.

REMARKS.--Flow regulated by upstream reservoirs. Records furnished by Arkansas Game and Fish Commission, Fisheries Division, Lonoke, Ark.

### TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
### (CONTINUOUS RECORDING THERMOMETER)

| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1 | 14.0 | 10.0 | 14.5 | 11.0 | 9.0 | 8.0 | 7.0 | 6.0 | 6.0 | 5.0 | 14.0 | 6.0 |
| 2 | 13.5 | 10.0 | 13.0 | 10.5 | 8.0 | 5.5 | 8.5 | 6.0 | 6.0 | 5.5 | 7.0 | 4.5 |
| 3 | 14.0 | 10.5 | 12.0 | 9.5 | 6.0 | 5.0 | 8.5 | 6.0 | 6.0 | 3.5 | 6.0 | 4.0 |
| 4 | 12.0 | 10.0 | 11.5 | 10.0 | 7.0 | 6.0 | 8.5 | 5.0 | 6.5 | 3.5 | 7.0 | 5.0 |
| 5 | 12.0 | 9.5 | 11.5 | 10.0 | 6.5 | 6.0 | -- | -- | 6.0 | 3.5 | 9.0 | 4.0 |
| 6 | 14.5 | 9.5 | 11.0 | 9.5 | 8.0 | 6.0 | -- | -- | 6.0 | 4.5 | 8.5 | 5.0 |
| 7 | 15.5 | 11.0 | 11.0 | 9.0 | 9.0 | 7.0 | -- | -- | 6.5 | 4.0 | 12.0 | 6.0 |
| 8 | 14.5 | 11.0 | 10.5 | 9.0 | 9.5 | 8.0 | -- | -- | 6.5 | 4.0 | 9.0 | 5.5 |
| 9 | 14.5 | 10.5 | 11.0 | 10.0 | 9.0 | 8.5 | -- | -- | 6.0 | 4.5 | 9.0 | 4.5 |
| 10 | 14.5 | 10.5 | 12.0 | 9.0 | 10.5 | 9.0 | 9.0 | 6.5 | 6.0 | 4.5 | 9.0 | 5.5 |
| 11 | 16.0 | 10.5 | 13.0 | 9.0 | 9.5 | 7.0 | 9.0 | 6.0 | 6.5 | 4.5 | 13.0 | 6.0 |
| 12 | 14.5 | 10.5 | 13.0 | 9.0 | 9.5 | 6.5 | 9.0 | 5.5 | 6.0 | 5.0 | 15.5 | 10.5 |
| 13 | 14.5 | 10.0 | 14.0 | 10.0 | 8.0 | 6.5 | 8.0 | 6.0 | 8.5 | 4.5 | 11.5 | 6.5 |
| 14 | 14.5 | 9.5 | 15.5 | 12.0 | 12.0 | 6.5 | 7.0 | 5.0 | 9.5 | 4.5 | 10.0 | 8.0 |
| 15 | 13.5 | 10.0 | 16.0 | 11.5 | 11.5 | 10.0 | 6.5 | 4.0 | 9.0 | 6.0 | 11.5 | 6.0 |
| 16 | 14.5 | 10.0 | 14.5 | 10.0 | 9.5 | 8.5 | 5.5 | 4.0 | 7.0 | 5.0 | 9.0 | 5.5 |
| 17 | 16.0 | 10.5 | 13.5 | 10.0 | 10.0 | 8.0 | 6.5 | 4.0 | 6.0 | 4.5 | 9.0 | 6.0 |
| 18 | 14.0 | 10.5 | 12.0 | 10.5 | 9.0 | 6.5 | 8.0 | 6.5 | 6.0 | 4.0 | 11.5 | 6.0 |
| 19 | 13.5 | 12.0 | 11.5 | 9.5 | 7.0 | 6.5 | 8.0 | 6.5 | 6.5 | 3.5 | 14.0 | 8.0 |
| 20 | 14.0 | 11.0 | 11.0 | 7.0 | 8.5 | 5.5 | 10.0 | 7.0 | 8.0 | 3.5 | 10.5 | 7.0 |
| 21 | 14.0 | 10.5 | 11.0 | 6.5 | 10.0 | 7.0 | 9.0 | 7.0 | 10.0 | 5.5 | 10.5 | 7.0 |
| 22 | 12.0 | 10.0 | 10.0 | 4.5 | 9.5 | 7.0 | 9.0 | 7.0 | 8.0 | 5.0 | 10.5 | 6.0 |
| 23 | 12.0 | 10.5 | 10.0 | 8.0 | 9.5 | 6.0 | 10.0 | 6.5 | -- | -- | 10.0 | 6.5 |
| 24 | 13.0 | 10.5 | 9.5 | 8.0 | 9.0 | 7.0 | 10.5 | 6.5 | -- | -- | 6.5 | 6.0 |
| 25 | 12.0 | 10.0 | 9.0 | 6.0 | 12.0 | 6.0 | 7.0 | 5.0 | -- | -- | 7.0 | 5.5 |
| 26 | 12.0 | 10.0 | 8.0 | 7.0 | 13.0 | 10.0 | 8.0 | 4.5 | 9.0 | 5.0 | -- | -- |
| 27 | 12.0 | 11.0 | 8.5 | 6.5 | 14.5 | 10.5 | 6.5 | 5.5 | 10.0 | 5.5 | -- | -- |
| 28 | 12.0 | 10.0 | 7.0 | 6.0 | 11.5 | 8.5 | 6.0 | 4.5 | 11.5 | 6.0 | 7.0 | 6.5 |
| 29 | 13.5 | 10.5 | 10.0 | 5.5 | 10.0 | 8.0 | 5.0 | 4.0 | 13.5 | 6.5 | 8.0 | 6.0 |
| 30 | 15.0 | 10.5 | 10.0 | 8.0 | 10.5 | 8.5 | 6.0 | 3.0 | -- | -- | 9.0 | 5.5 |
| 31 | 14.5 | 11.0 | -- | -- | 9.0 | 6.5 | 6.5 | 2.0 | -- | -- | 11.0 | 6.0 |
| AVG | 13.5 | 10.5 | 11.5 | 8.5 | 9.5 | 7.0 | 8.0 | 5.5 | 7.5 | 4.5 | 10.0 | 6.0 |

| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1 | 10.0 | 6.0 | 11.5 | 8.5 | 16.0 | 8.0 | 15.0 | 9.0 | 16.5 | 9.5 | 15.0 | 10.5 |
| 2 | 12.0 | 5.5 | 11.5 | 9.0 | 21.0 | 13.5 | 17.0 | 10.0 | 16.5 | 10.0 | 18.0 | 11.5 |
| 3 | 10.0 | 6.5 | 10.0 | 7.0 | 16.0 | 11.0 | 18.0 | 14.5 | 16.5 | 10.0 | 17.0 | 14.0 |
| 4 | 11.0 | 5.5 | 11.0 | 7.0 | 19.0 | 11.5 | 17.0 | 11.5 | 14.0 | 10.0 | 16.5 | 14.5 |
| 5 | 13.0 | 6.0 | 13.5 | 7.0 | 18.5 | 9.0 | 18.0 | 11.0 | 15.5 | 10.5 | 18.5 | 13.0 |
| 6 | 14.5 | 8.0 | 13.5 | 9.0 | 17.0 | 8.5 | 20.0 | 14.5 | 16.0 | 10.5 | 18.5 | 13.0 |
| 7 | 13.0 | 9.0 | 14.0 | 8.5 | 18.0 | 8.5 | 19.0 | 14.0 | -- | -- | 19.0 | 11.5 |
| 8 | 9.5 | 6.5 | 11.5 | 8.5 | 16.5 | 9.0 | 17.0 | 11.0 | -- | -- | 18.0 | 11.5 |
| 9 | 12.0 | 5.5 | 9.5 | 8.0 | 16.5 | 8.5 | 19.5 | 10.5 | -- | -- | 18.5 | 11.5 |
| 10 | 11.0 | 8.0 | 10.5 | 7.0 | 12.0 | 9.0 | 13.0 | 9.0 | -- | -- | 18.5 | 13.0 |
| 11 | 14.5 | 7.0 | 13.0 | 8.5 | 18.0 | 10.0 | 15.5 | 9.0 | -- | -- | 18.0 | 11.0 |
| 12 | 11.5 | 7.0 | 12.0 | 8.5 | 17.0 | 9.0 | 17.0 | 9.5 | -- | -- | 17.0 | 10.5 |
| 13 | 13.0 | 8.0 | 15.0 | 8.0 | 18.0 | 8.5 | 18.0 | 10.0 | -- | -- | 16.0 | 11.0 |
| 14 | 11.0 | 8.0 | 13.5 | 9.0 | 15.5 | 10.0 | 13.0 | 9.0 | 16.0 | 10.0 | 13.5 | 11.0 |
| 15 | 12.0 | 7.0 | 13.0 | 9.5 | 18.0 | 10.0 | -- | -- | 15.5 | 10.0 | 18.0 | 11.5 |
| 16 | 11.0 | 7.0 | 11.5 | 8.0 | 18.0 | 10.0 | -- | -- | 16.0 | 10.0 | 17.0 | 11.0 |
| 17 | 11.5 | 8.5 | 12.0 | 8.0 | 18.5 | 10.0 | 19.5 | 9.5 | 16.0 | 10.0 | 16.5 | 11.0 |
| 18 | 14.5 | 7.0 | 11.5 | 8.0 | 20.5 | 14.0 | 15.0 | 9.0 | 16.5 | 10.0 | 15.5 | 11.0 |
| 19 | 13.0 | 8.0 | 11.5 | 7.0 | 20.0 | 11.0 | 15.5 | 9.5 | 14.0 | 10.0 | 15.5 | 11.0 |
| 20 | 9.5 | 8.0 | 16.0 | 8.5 | 16.5 | 9.5 | -- | -- | 16.5 | 10.0 | 17.0 | 11.0 |
| 21 | 13.5 | 7.0 | 16.0 | 8.5 | 19.5 | 13.0 | -- | -- | 16.0 | 10.5 | 14.0 | 11.5 |
| 22 | 14.5 | 7.0 | 15.5 | 8.5 | 21.5 | 15.5 | 15.5 | 9.0 | 16.5 | 10.5 | 13.5 | 13.5 |
| 23 | 16.5 | 9.5 | 16.5 | 8.5 | 20.0 | 13.5 | 17.0 | 9.5 | 17.0 | 11.5 | 15.0 | 13.0 |
| 24 | 10.0 | 7.0 | 17.0 | 9.5 | 19.0 | 11.5 | 15.5 | 9.5 | 18.5 | 12.0 | 15.5 | 11.5 |
| 25 | 11.5 | 7.0 | 22.0 | 9.5 | 20.0 | 12.0 | 18.0 | 10.0 | 18.0 | 12.0 | 14.0 | 11.5 |
| 26 | 12.0 | 7.0 | 16.5 | 9.0 | 18.0 | 12.0 | 16.5 | 9.5 | 18.5 | 11.5 | 13.5 | 11.5 |
| 27 | 10.0 | 7.0 | 20.0 | 14.5 | 17.0 | 9.5 | 17.0 | 9.5 | 21.0 | 15.5 | 13.0 | 11.5 |
| 28 | 8.5 | 7.0 | 15.5 | 11.5 | 18.5 | 9.0 | 16.0 | 11.0 | 21.5 | 16.5 | 17.0 | 11.5 |
| 29 | 10.5 | 7.0 | 15.5 | 13.0 | 19.5 | 12.0 | 18.5 | 14.0 | 18.0 | 10.0 | 17.0 | 11.5 |
| 30 | 14.0 | 7.0 | 18.5 | 12.0 | 19.0 | 9.0 | 20.5 | 15.5 | 16.0 | 10.0 | 15.0 | 10.5 |
| 31 | -- | -- | 16.0 | 8.5 | -- | -- | 18.5 | 10.0 | 16.5 | 11.0 | -- | -- |
| AVG | 12.0 | 7.0 | 14.0 | 9.0 | 18.0 | 10.5 | 17.0 | 10.5 | 16.5 | 11.0 | 16.5 | 11.5 |

## 07059500 NORFORK LAKE NEAR NORFORK, ARK.

LOCATION.--Lat 36°14'57", long 92°14'16", in SE¼ sec.2, T.18 N., R.12 W., Baxter County, at dam on North Fork River, 4.3 miles northeast of Norfork, and at mile 4.8.

DRAINAGE AREA.--1,806 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1969, October 1970 to September 1972.

REMARKS.--Records furnished (for log boom location about 1,000 ft upstream from dam) by Corps of Engineers, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

|  | FEBRUARY 14 |  |  | APRIL 5 |  |  | AUGUST 9 |  |  |
|---|---|---|---|---|---|---|---|---|---|
| DEPTH (FEET) | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) |
| 0 | 11.6 | 8.5 | -- | 10.3 | 14.4 | -- | 7.8 | 29.0 | 320 |
| 5 | 11.4 | 7.9 | 660 | 10.8 | 11.0 | 635 | -- | -- | -- |
| 10 | 11.4 | 7.9 | 660 | 11.0 | 10.8 | 635 | 7.8 | 28.5 | 310 |
| 15 | -- | -- | -- | 11.0 | 10.8 | 635 | -- | -- | -- |
| 20 | 11.4 | 7.8 | 660 | 10.8 | 10.8 | 635 | 7.8 | 28.5 | 310 |
| 25 | -- | -- | -- | 10.6 | 10.8 | 635 | -- | -- | -- |
| 30 | -- | -- | -- | 10.4 | 10.8 | 635 | 7.8 | 28.3 | 312 |
| 40 | 11.1 | 7.8 | 660 | 10.4 | 10.8 | 640 | 6.0 | 22.0 | 300 |
| 45 | -- | -- | -- | -- | -- | -- | 3.3 | 18.0 | 270 |
| 50 | -- | -- | -- | 10.6 | 10.6 | 645 | 2.5 | 17.5 | 270 |
| 60 | 11.1 | 7.8 | 660 | 10.4 | 10.5 | 645 | 2.2 | 15.0 | 260 |
| 70 | -- | -- | -- | 10.2 | 9.9 | 650 | 3.0 | 14.0 | 255 |
| 80 | 11.4 | 7.8 | 660 | 9.8 | 8.8 | 650 | 3.2 | 12.0 | 250 |
| 90 | -- | -- | -- | 9.5 | 8.3 | 650 | 4.0 | 11.0 | 245 |
| 100 | 11.1 | 7.8 | 660 | 9.8 | 8.2 | 650 | 3.6 | 10.0 | 240 |
| 110 | -- | -- | -- | 9.8 | 8.2 | 650 | 3.0 | 10.0 | 240 |
| 120 | -- | -- | -- | 9.5 | 8.1 | 650 | 1.8 | 9.5 | 240 |
| 125 | 11.1 | 7.8 | 660 | -- | -- | -- | 1.8 | 9.5 | 240 |
| 130 | -- | -- | -- | 8.8 | 8.1 | 650 | 2.3 | 9.0 | 240 |
| 140 | -- | -- | -- | 8.8 | 8.1 | 650 | 2.1 | 9.0 | 240 |
| 145 | 10.8 | 7.8 | 660 | -- | -- | -- | -- | -- | -- |
| 150 | -- | -- | -- | 8.8 | 8.1 | 650 | .4 | 9.0 | 235 |
| 155 | 10.8 | 7.8 | 680 | -- | -- | -- | -- | -- | -- |

|  | AUGUST 23 |  |  | SEPTEMBER 7 |  |  |
|---|---|---|---|---|---|---|
| DEPTH (FEET) | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) |
| 0 | 7.4 | 29.5 | 315 | 7.7 | 27.0 | 295 |
| 10 | 7.4 | 29.4 | 315 | 7.7 | 27.0 | 300 |
| 20 | 7.4 | 29.4 | 315 | 7.7 | 27.0 | 300 |
| 30 | 7.3 | 27.4 | 315 | 5.5 | 25.5 | 310 |
| 35 | 7.0 | 24.9 | 310 | 4.1 | 24.5 | 315 |
| 40 | 3.8 | 21.5 | 295 | 3.3 | 21.5 | 290 |
| 50 | 1.4 | 18.1 | 275 | .6 | 18.5 | 265 |
| 60 | 1.2 | 15.5 | 265 | .5 | 16.5 | 265 |
| 70 | 2.1 | 14.0 | 255 | 1.0 | 14.5 | 255 |
| 80 | 2.9 | 12.5 | 250 | 1.8 | 13.0 | 250 |
| 90 | 3.2 | 11.5 | 245 | 2.3 | 12.0 | 250 |
| 100 | 2.5 | 10.5 | 245 | 2.5 | 11.0 | 245 |
| 110 | 1.5 | 10.0 | 245 | 1.3 | 10.5 | 245 |
| 120 | .4 | 9.5 | 245 | .4 | 10.0 | 245 |
| 130 | .2 | 9.5 | 245 | .3 | 10.0 | 245 |
| 140 | .2 | 9.5 | 245 | .3 | 9.5 | 245 |
| 145 | .2 | 9.5 | 245 | .3 | 9.5 | 245 |

## 07060500 WHITE RIVER AT CALICO ROCK, ARK.

LOCATION.--Lat 36°06'58", long 92°08'35", in SE¼NE¼ sec.22, T.17 N., R.11 W., Izard County, at gaging station on left bank at Calico Rock, 200 ft upstream from bridge on State Highway 5, just upstream from Calico Creek, 3.2 miles downstream from Cataract Creek, 6 miles upstream from Piney Creek, and at mile 359.1.

DRAINAGE AREA.--9,965 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1966 to September 1972.

EXTREMES.--Current year:
Water temperatures: Maximum, 25.5°C June 19; minimum, 3.5°C Jan. 17, 29, Feb. 7.

Period of record:
Water temperatures: Maximum, 27.5°C July 6, 1971; minimum, 3.0°C Dec. 25, 1967, Feb. 8, 1971.

REMARKS.--Flow regulated by upstream reservoirs. Records furnished by Arkansas Game and Fish Commission, Fisheries Division, Lonoke, Ark.

### TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
### (CONTINUOUS RECORDING THERMOMETER)

| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1 | 14.0 | 11.5 | 17.0 | 14.0 | -- | -- | 9.0 | 8.0 | 6.0 | 5.0 | 13.0 | 9.5 |
| 2 | 14.0 | 12.0 | -- | -- | -- | -- | 10.0 | 7.0 | 6.5 | 6.0 | 11.5 | 8.0 |
| 3 | 14.5 | 14.0 | -- | -- | -- | -- | 9.5 | 7.0 | 6.0 | 4.5 | 8.0 | 6.0 |
| 4 | 15.0 | 13.5 | 13.0 | 11.0 | -- | -- | -- | -- | 5.5 | 4.0 | 8.5 | 6.0 |
| 5 | 14.0 | 13.5 | 13.0 | 11.5 | -- | -- | -- | -- | 6.0 | 4.5 | 9.5 | 6.0 |
| 6 | 14.5 | 12.0 | 13.0 | 10.0 | -- | -- | -- | -- | 6.0 | 5.0 | 11.0 | 6.5 |
| 7 | 18.0 | 12.0 | -- | -- | -- | -- | -- | -- | 6.5 | 3.5 | 10.0 | 8.5 |
| 8 | 15.5 | 11.0 | -- | -- | 9.0 | 8.5 | -- | -- | 6.5 | 5.0 | 10.5 | 6.5 |
| 9 | 18.0 | 10.5 | -- | -- | 9.5 | 8.5 | -- | -- | 6.5 | 5.5 | 10.0 | 6.0 |
| 10 | 18.0 | 13.0 | 11.5 | 9.5 | 11.0 | 9.5 | -- | -- | 6.0 | 5.0 | 11.5 | 7.0 |
| 11 | 19.0 | 13.0 | 13.0 | 5.5 | 11.0 | 10.0 | 9.5 | 7.0 | 7.0 | 5.0 | 14.0 | 9.5 |
| 12 | 19.5 | 14.0 | 21.5 | 9.0 | 10.0 | 9.5 | 9.0 | 6.5 | 6.5 | 6.0 | 17.0 | 12.0 |
| 13 | 17.0 | 15.0 | 16.5 | 10.0 | 9.5 | 8.5 | 9.0 | 7.0 | 8.5 | 5.5 | 15.5 | 11.5 |
| 14 | 18.0 | 12.0 | 23.5 | 15.0 | 12.0 | 9.5 | 7.0 | 6.0 | 10.0 | 5.5 | 11.5 | 8.5 |
| 15 | 18.5 | 14.0 | 21.5 | 13.0 | 12.0 | 11.0 | -- | -- | 10.0 | 7.0 | 12.0 | 10.0 |
| 16 | 18.5 | 13.5 | 21.0 | 9.5 | 11.0 | 10.5 | -- | -- | 10.5 | 7.0 | 11.0 | 9.0 |
| 17 | 18.0 | 13.5 | 16.5 | 10.5 | 10.5 | 9.5 | 4.5 | 3.5 | 8.5 | 6.5 | 9.0 | 7.0 |
| 18 | 17.0 | 14.5 | 15.5 | 12.0 | -- | -- | 7.0 | 4.5 | 6.5 | 5.0 | 11.5 | 8.5 |
| 19 | 15.5 | 14.5 | -- | -- | -- | -- | 8.0 | 6.5 | 6.5 | 4.5 | 14.0 | 9.5 |
| 20 | 16.5 | 14.5 | -- | -- | -- | -- | 10.0 | 8.0 | 6.5 | 5.0 | 15.5 | 11.0 |
| 21 | 18.0 | 15.5 | -- | -- | 9.5 | 9.0 | 9.5 | 9.0 | 10.0 | 6.0 | 13.5 | 10.5 |
| 22 | 15.5 | 13.0 | -- | -- | 9.5 | 8.5 | 9.0 | 8.5 | 9.5 | 7.0 | 13.5 | 8.5 |
| 23 | 13.5 | 13.0 | -- | -- | 9.0 | 8.5 | -- | -- | 8.5 | 6.5 | 12.0 | 9.0 |
| 24 | 14.0 | 13.0 | -- | -- | 9.5 | 8.5 | -- | -- | 9.0 | 8.0 | 10.0 | 8.0 |
| 25 | 16.5 | 13.0 | -- | -- | 11.5 | 9.5 | -- | -- | 8.5 | 7.0 | 8.0 | 7.0 |
| 26 | 14.5 | 13.0 | -- | -- | 13.5 | 10.5 | 7.0 | 6.0 | 10.5 | 6.5 | 8.0 | 6.5 |
| 27 | 15.5 | 13.0 | -- | -- | -- | -- | 6.5 | 5.5 | 11.5 | 7.0 | 10.5 | 8.0 |
| 28 | 14.5 | 13.0 | -- | -- | -- | -- | 5.5 | 4.5 | 13.0 | 8.0 | 11.0 | 9.0 |
| 29 | 14.5 | 13.5 | -- | -- | 10.5 | 9.5 | 6.0 | 3.5 | 13.5 | 8.5 | 9.0 | 8.0 |
| 30 | 14.5 | 13.0 | -- | -- | 11.5 | 10.0 | -- | -- | -- | -- | 9.5 | 7.0 |
| 31 | 16.0 | 13.5 | -- | -- | 10.0 | 9.0 | -- | -- | -- | -- | 11.5 | 8.5 |
| AVG | 16.0 | 13.0 | -- | -- | -- | -- | -- | -- | 8.0 | 6.0 | 11.5 | 8.0 |

| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1 | 11.5 | 8.5 | 16.0 | 13.5 | 15.5 | 13.5 | 18.5 | 13.5 | 19.0 | 13.5 | 17.0 | 15.0 |
| 2 | 13.0 | 9.0 | 16.0 | 13.0 | 20.0 | 11.5 | 18.5 | 14.0 | 19.5 | 13.5 | 19.0 | 15.0 |
| 3 | 11.5 | 11.0 | 14.5 | 12.0 | 23.0 | 12.0 | 19.5 | 17.0 | 15.5 | 12.0 | 20.0 | 18.5 |
| 4 | 11.0 | 9.0 | 12.0 | 11.0 | 23.5 | 15.5 | 19.5 | 17.0 | 16.0 | 13.5 | 19.5 | 18.0 |
| 5 | 13.0 | 8.0 | 13.5 | 11.0 | 23.5 | 16.0 | 23.0 | 16.5 | 17.0 | 13.0 | 23.0 | 17.0 |
| 6 | 15.5 | 11.0 | 16.0 | 12.0 | 20.0 | 13.5 | 21.5 | 17.0 | 20.0 | 16.0 | 23.5 | 19.0 |
| 7 | 16.5 | 12.0 | 16.5 | 15.5 | 17.0 | 11.5 | 23.0 | 18.0 | 19.5 | 15.0 | 22.0 | 17.0 |
| 8 | 12.0 | 10.0 | 15.5 | 11.5 | 20.0 | 11.0 | 22.0 | 14.5 | 19.0 | 13.5 | 21.0 | 15.5 |
| 9 | 11.0 | 10.0 | 13.0 | 10.0 | 16.5 | 11.0 | 25.0 | 19.5 | 18.5 | 13.5 | 20.5 | 15.0 |
| 10 | 12.0 | 10.0 | 13.0 | 10.5 | 15.0 | 11.5 | 20.5 | 14.0 | 19.5 | 14.0 | 21.0 | 15.5 |
| 11 | 12.0 | 10.0 | 15.5 | 11.5 | 19.0 | 12.0 | 14.5 | 11.5 | 20.0 | 13.5 | 24.0 | 17.0 |
| 12 | 15.0 | 10.5 | 15.0 | 13.0 | 22.0 | 18.0 | 17.0 | 12.0 | 16.5 | 13.0 | 17.0 | 13.5 |
| 13 | 14.0 | 11.5 | 15.0 | 11.5 | 18.0 | 14.0 | 20.5 | 13.0 | 15.5 | 14.5 | 15.5 | 13.5 |
| 14 | 14.0 | 11.5 | 18.0 | 14.5 | 19.0 | 13.0 | 16.5 | 13.0 | 16.0 | 13.5 | 15.0 | 13.0 |
| 15 | 13.5 | 12.0 | 18.0 | 12.0 | 21.0 | 15.0 | 14.0 | 11.5 | 15.0 | 12.0 | 18.5 | 14.5 |
| 16 | 16.0 | 13.0 | 15.5 | 11.5 | 21.5 | 15.0 | 18.0 | 13.5 | 15.0 | 13.0 | 18.5 | 14.5 |
| 17 | 18.0 | 14.0 | 12.0 | 11.0 | 21.5 | 13.0 | 24.5 | 16.5 | 15.0 | 13.0 | 17.0 | 15.5 |
| 18 | 15.5 | 13.0 | 12.0 | 10.5 | 23.5 | 18.0 | 18.0 | 13.5 | 15.0 | 13.0 | 16.5 | 15.5 |
| 19 | 16.5 | 12.0 | 13.0 | 10.5 | 25.5 | 20.0 | 17.0 | 12.0 | 15.5 | 13.5 | 15.5 | 13.5 |
| 20 | 14.0 | 11.0 | 16.0 | 10.5 | 23.5 | 13.5 | 15.5 | 12.0 | 15.0 | 12.0 | 15.5 | 13.5 |
| 21 | 14.5 | 11.0 | 19.5 | 15.0 | 21.0 | 12.0 | 14.0 | 11.5 | 15.5 | 14.5 | 16.5 | 14.5 |
| 22 | 15.5 | 12.0 | 21.5 | 16.0 | 22.0 | 13.0 | 15.0 | 12.0 | 14.5 | 12.0 | 16.0 | 15.0 |
| 23 | 17.0 | 15.0 | 15.5 | 11.5 | 22.0 | 14.5 | 17.0 | 13.5 | 19.0 | 13.5 | 17.0 | 15.5 |
| 24 | 16.5 | 14.5 | 20.0 | 13.0 | 21.5 | 12.0 | 16.5 | 14.0 | 21.0 | 15.0 | 18.5 | 17.0 |
| 25 | 14.5 | 11.0 | 18.0 | 12.0 | 23.5 | 13.5 | 16.5 | 12.0 | 22.0 | 15.0 | 18.0 | 15.5 |
| 26 | 14.0 | 11.5 | 21.5 | 13.0 | 24.0 | 16.0 | 15.0 | 12.0 | 22.0 | 16.0 | 16.5 | 14.0 |
| 27 | 14.5 | 13.0 | 20.0 | 11.5 | 23.5 | 14.0 | 15.0 | 9.5 | 24.5 | 19.5 | 16.0 | 15.0 |
| 28 | 13.5 | 11.5 | -- | -- | 16.5 | 13.5 | 18.5 | 13.0 | 24.5 | 20.0 | 15.5 | 14.5 |
| 29 | 12.0 | 10.0 | 21.0 | 16.5 | 20.0 | 12.0 | 19.0 | 13.5 | 20.5 | 16.0 | 16.5 | 14.5 |
| 30 | 14.0 | 12.0 | 20.5 | 14.0 | 21.0 | 13.0 | 23.5 | 19.0 | 16.5 | 14.5 | 16.5 | 13.5 |
| 31 | -- | -- | 19.5 | 11.0 | -- | -- | 24.5 | 15.5 | 18.0 | 14.0 | -- | -- |
| AVG | 14.0 | 11.0 | 16.5 | 12.5 | 20.5 | 13.5 | 18.5 | 14.0 | 18.0 | 14.0 | 18.0 | 15.0 |

## 07060660 WHITE RIVER AT SYLAMORE, ARK.

LOCATION.--Lat 35°57'08", long 92°06'34", in N½ sec.12, T.15 N., R.11 W., Izard County, temperature recorder on right bank, 0.8 mile upstream from ferry at Sylamore, 0.8 mile upstream from South Sylamore Creek, and 8.5 miles downstream from Wideman Creek.

DRAINAGE AREA.--10,238 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1966 to September 1972.

EXTREMES.--Current year:
Water temperatures: Maximum, 29.0°C June 19; minimum, 2.0°C Jan. 31.

Period of record:
Water temperatures: Maximum, 30.5°C July 6, 1971; minimum, 1.0°C Feb. 9, 1971.

REMARKS.--Flow regulated by upstream reservoirs. Records furnished by Arkansas Game and Fish Commission, Fisheries Division, Lonoke, Ark.

### TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
### (CONTINUOUS RECORDING THERMOMETER)

| DAY | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1 | 13.5 | 13.0 | 18.0 | 14.0 | -- | -- | 9.0 | 8.0 | 5.0 | 4.5 | -- | -- |
| 2 | 15.0 | 13.0 | 16.5 | 13.5 | -- | -- | 10.0 | 8.0 | 6.0 | 5.0 | -- | --- |
| 3 | 15.0 | 13.0 | 13.5 | 11.0 | 6.5 | 5.5 | 8.0 | 7.0 | 6.0 | 4.0 | -- | -- |
| 4 | 15.0 | 13.5 | 11.5 | 10.5 | 6.5 | 5.5 | 8.0 | 6.5 | 5.5 | 4.0 | -- | -- |
| 5 | 15.5 | 13.5 | 11.5 | 11.5 | 6.5 | 6.0 | 7.0 | 6.0 | 6.0 | 4.0 | -- | -- |
| 6 | 16.0 | 12.0 | 12.0 | 10.0 | 9.0 | 6.5 | 7.0 | 6.0 | 6.5 | 5.5 | -- | -- |
| 7 | 18.0 | 12.0 | -- | -- | 9.0 | 8.0 | 7.0 | 6.0 | 8.0 | 3.5 | -- | -- |
| 8 | 16.0 | 14.0 | -- | -- | 9.5 | 8.0 | 7.0 | 6.0 | 6.0 | 3.5 | -- | -- |
| 9 | 18.5 | 14.0 | -- | -- | 10.5 | 8.5 | 9.5 | 8.0 | 6.5 | 5.0 | 13.5 | 8.0 |
| 10 | 19.0 | 13.0 | -- | -- | 10.5 | 10.5 | 10.0 | 8.0 | 6.0 | 5.0 | 13.5 | 10.0 |
| 11 | 19.0 | 11.0 | -- | -- | 10.5 | 10.0 | 9.0 | 7.0 | 6.5 | 5.0 | 18.0 | 12.0 |
| 12 | -- | -- | 14.5 | 10.0 | 10.0 | 9.5 | 9.0 | 6.5 | 6.5 | 6.5 | 17.0 | 14.5 |
| 13 | 19.5 | 14.0 | 15.5 | 11.0 | 9.5 | 8.5 | 9.0 | 7.0 | 12.0 | 5.5 | 14.5 | 9.5 |
| 14 | 18.5 | 14.5 | 18.0 | 13.0 | 11.0 | 8.5 | 6.5 | 5.5 | 10.5 | 5.5 | 13.5 | 9.5 |
| 15 | 18.5 | 15.0 | 18.0 | 12.0 | 11.5 | 10.5 | -- | -- | 10.5 | 8.0 | 11.5 | 10.0 |
| 16 | 16.0 | 14.0 | 17.0 | 12.0 | 11.0 | 10.5 | -- | -- | 10.5 | 8.0 | 10.0 | 8.5 |
| 17 | 18.0 | 14.0 | -- | -- | 10.5 | 9.5 | -- | -- | -- | -- | 13.5 | 8.5 |
| 18 | 19.0 | 15.0 | -- | -- | 9.0 | 8.5 | -- | -- | -- | -- | 14.5 | 9.0 |
| 19 | 15.5 | 15.0 | -- | -- | 8.5 | 8.5 | -- | -- | -- | -- | -- | -- |
| 20 | 18.0 | 15.5 | 13.0 | 9.0 | 9.5 | 8.0 | -- | -- | 6.5 | 5.0 | -- | -- |
| 21 | 18.5 | 16.0 | 12.0 | 8.5 | 9.5 | 8.0 | -- | -- | 10.5 | 5.5 | -- | -- |
| 22 | 16.5 | 13.5 | 8.5 | 5.0 | 9.5 | 8.0 | -- | -- | 9.5 | 8.0 | -- | -- |
| 23 | 14.0 | 13.0 | 8.0 | 4.5 | -- | -- | -- | -- | 9.0 | 7.0 | -- | -- |
| 24 | 14.0 | 13.0 | 8.5 | 6.5 | -- | -- | -- | -- | 9.0 | 8.0 | -- | -- |
| 25 | 18.0 | 13.0 | 9.5 | 6.5 | -- | -- | -- | -- | 9.5 | 8.0 | -- | -- |
| 26 | 14.5 | 13.0 | 8.5 | 7.0 | -- | -- | -- | -- | -- | -- | -- | -- |
| 27 | 15.5 | 13.0 | 10.5 | 6.5 | -- | -- | -- | -- | -- | -- | -- | -- |
| 28 | 15.0 | 13.5 | 7.0 | 6.0 | -- | -- | -- | -- | -- | -- | -- | -- |
| 29 | 15.5 | 13.0 | 6.5 | 5.5 | 10.0 | 9.5 | 6.0 | 4.5 | -- | -- | -- | -- |
| 30 | 15.0 | 13.5 | -- | -- | 11.5 | 10.0 | 6.0 | 4.0 | -- | -- | 10.0 | 7.0 |
| 31 | 17.0 | 13.0 | -- | -- | 10.0 | 9.0 | 8.0 | 2.0 | -- | -- | 11.0 | 8.5 |
| AVG | 16.5 | 13.5 | -- | -- | -- | -- | -- | -- | 8.0 | 5.5 | -- | -- |

| DAY | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1 | 13.5 | 9.0 | 15.0 | 14.0 | 18.5 | 16.5 | 20.5 | 16.0 | 23.5 | 18.0 | 21.0 | 16.5 |
| 2 | 14.0 | 8.5 | 15.0 | 13.5 | 20.5 | 14.0 | 18.5 | 14.5 | 19.0 | 15.5 | 21.0 | 16.5 |
| 3 | 12.0 | 10.5 | 15.0 | 14.0 | 23.0 | 19.0 | 21.0 | 18.0 | 19.0 | 13.5 | 20.5 | 19.0 |
| 4 | 12.0 | 9.0 | 14.0 | 13.0 | 25.5 | 19.0 | 19.5 | 16.5 | 17.0 | 13.5 | 19.5 | 18.5 |
| 5 | -- | -- | 14.5 | 12.0 | 26.0 | 20.5 | 24.0 | 16.0 | 16.5 | 14.5 | 25.0 | 18.5 |
| 6 | -- | -- | 16.0 | 13.0 | 23.0 | 18.5 | 25.0 | 18.0 | 23.5 | 16.5 | 25.0 | 19.0 |
| 7 | -- | -- | 18.5 | 15.5 | 19.0 | 14.5 | 25.5 | 18.0 | 24.0 | 19.0 | 25.0 | 20.0 |
| 8 | -- | -- | 16.5 | 15.5 | 19.0 | 14.5 | 23.0 | 20.0 | 19.5 | 16.0 | 22.0 | 20.0 |
| 9 | -- | -- | 16.0 | 11.0 | 18.5 | 16.0 | 28.0 | 19.5 | 18.5 | 15.5 | 20.5 | 18.5 |
| 10 | -- | -- | 13.5 | 11.0 | 18.0 | 14.0 | 24.5 | 18.0 | 21.0 | 15.5 | 23.0 | 19.0 |
| 11 | -- | -- | 15.5 | 11.5 | 21.0 | 13.5 | 18.0 | 14.0 | 20.0 | 17.0 | 25.0 | 18.5 |
| 12 | -- | -- | 15.5 | 14.5 | 24.5 | 16.5 | 18.0 | 14.0 | 20.0 | 14.5 | 22.0 | 14.5 |
| 13 | -- | -- | 16.0 | 14.0 | 21.0 | 16.0 | 20.5 | 16.0 | 18.0 | 14.5 | 15.5 | 14.5 |
| 14 | -- | -- | 19.0 | 14.5 | 18.0 | 15.0 | 19.5 | 14.5 | 16.5 | 14.5 | 14.5 | 13.5 |
| 15 | 14.5 | 11.5 | 19.5 | 16.0 | 24.0 | 17.0 | 14.5 | 13.0 | 15.0 | 13.5 | 17.0 | 13.5 |
| 16 | 15.0 | 13.0 | 18.0 | 14.0 | 24.5 | 19.5 | 19.0 | 13.5 | 16.0 | 13.5 | 19.0 | 17.0 |
| 17 | 18.0 | 14.0 | 15.5 | 12.0 | 23.5 | 18.5 | 26.5 | 17.0 | 15.5 | 14.0 | 19.5 | 16.0 |
| 18 | 16.0 | 14.5 | 14.5 | 11.5 | 27.0 | 19.5 | 23.0 | 14.5 | 15.0 | 14.0 | 19.5 | 15.5 |
| 19 | 16.5 | 14.5 | 14.0 | 11.5 | 29.0 | 21.0 | 18.5 | 14.0 | 16.5 | 14.5 | 16.0 | 14.0 |
| 20 | 16.5 | 12.0 | 16.0 | 12.0 | 24.0 | 20.0 | 18.0 | 13.0 | 15.0 | 14.0 | 15.5 | 14.0 |
| 21 | 14.5 | 12.0 | 23.0 | 15.0 | 22.0 | 18.0 | 14.0 | 13.0 | 16.5 | 14.0 | 16.0 | 14.5 |
| 22 | 14.5 | 13.5 | 24.5 | 18.0 | 22.0 | 18.0 | 15.0 | 13.5 | 14.5 | 12.0 | 17.0 | 15.5 |
| 23 | 16.5 | 15.0 | 18.0 | 15.0 | 23.5 | 18.0 | 18.0 | 14.0 | 18.5 | 13.0 | 18.0 | 16.0 |
| 24 | 16.5 | 15.0 | 21.5 | 14.5 | 21.0 | 17.0 | 19.0 | 16.5 | 23.0 | 17.0 | 19.5 | 17.0 |
| 25 | 15.0 | 12.0 | 21.5 | 18.0 | 23.0 | 18.0 | 18.0 | 14.5 | 21.0 | 18.0 | 18.5 | 17.0 |
| 26 | 14.5 | 12.0 | 21.5 | 18.0 | 26.0 | 20.0 | 17.0 | 13.5 | 25.5 | 19.5 | 17.0 | 14.5 |
| 27 | 14.0 | 13.0 | 20.0 | 16.0 | 24.0 | 19.5 | 16.0 | 13.5 | 26.0 | 19.5 | 16.5 | 14.5 |
| 28 | 14.0 | 13.5 | 18.5 | 16.0 | 22.0 | 15.5 | 18.0 | 14.0 | 26.5 | 20.0 | 16.5 | 15.5 |
| 29 | 13.5 | 12.0 | 21.0 | 16.5 | 21.0 | 14.5 | 20.0 | 15.5 | 23.5 | 20.0 | 17.0 | 15.5 |
| 30 | 15.0 | 12.0 | 20.5 | 19.0 | 21.0 | 16.5 | 24.5 | 18.0 | 20.0 | 16.0 | 17.0 | 13.5 |
| 31 | -- | -- | 19.0 | 15.5 | -- | -- | 27.0 | 20.0 | 18.0 | 15.0 | -- | -- |
| AVG | -- | -- | 17.5 | 14.5 | 22.5 | 17.0 | 20.5 | 15.5 | 19.5 | 15.5 | 19.5 | 16.5 |

## 07060710 NORTH SYLAMORE CREEK NEAR FIFTY SIX, ARK.

(Hydrologic bench-mark station)

LOCATION.--Lat 35°59'30", long 92°12'50", in SW¼NW¼ sec.25, T.16 N., R.12 W., Stone County, at gaging station on right bank, 30 ft upstream from bridge on Ozark National Forest service road, 200 ft downstream from Gunner Creek, 2.7 miles north of Fifty Six, and 7.0 miles upstream from South Sylamore Creek.

DRAINAGE AREA.--58.4 sq mi.

PERIOD OF RECORD.--Chemical analyses: November 1966 to September 1972.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | MEAN DIS- CHARGE (CFS) | DIS- SOLVED SILICA (SIO2) (MG/L) | DIS- SOLVED IRON (FE) (UG/L) | DIS- SOLVED MAN- GANESE (MN) (UG/L) | DIS- SOLVED CAL- CIUM (CA) (MG/L) | DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) | DIS- SOLVED SODIUM (NA) (MG/L) | DIS- SOLVED PO- TAS- SIUM (K) (MG/L) | BICAR- BONATE (HCO3) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|
| NOV. 04... | 4.0 | 6.5 | 20 | 80 | 49 | 8.1 | 2.4 | .7 | 186 |
| DEC. 10... | 2270 | 4.2 | 20 | 0 | 18 | 1.7 | .9 | 1.7 | 57 |
| JAN. 11... | 14 | 4.8 | 0 | 30 | 45 | 6.1 | 1.1 | .7 | 151 |
| FEB. 16... | 9.4 | 4.7 | 10 | 10 | 47 | 6.5 | 1.8 | .8 | 176 |
| MAR. 22... | 5.8 | 5.6 | 0 | 0 | 51 | 7.2 | 1.4 | .9 | 184 |
| MAY 05... | 65 | 7.6 | 40 | 0 | 40 | 5.1 | 1.0 | .7 | 140 |
| JUNE 09... | 5.8 | 7.6 | 50 | 0 | 45 | 6.5 | 1.8 | .8 | 172 |
| JULY 20... | 5.4 | 7.5 | 20 | 10 | 47 | 6.3 | 1.1 | .9 | 172 |
| AUG. 25... | 3.5 | 7.4 | 0 | 10 | 48 | 7.1 | 1.6 | .9 | 174 |
| SEP. 27... | 5.3 | 6.1 | 10 | 0 | 46 | 6.5 | 2.3 | 1.1 | 176 |

| DATE | CAR- BONATE (CO3) (MG/L) | ALKA- LINITY AS CACO3 (MG/L) | DIS- SOLVED SULFATE (SO4) (MG/L) | DIS- SOLVED CHLO- RIDE (CL) (MG/L) | DIS- SOLVED FLUO- RIDE (F) (MG/L) | DIS- SOLVED NITRATE (N) (MG/L) | TOTAL PHOS- PHORUS (P) (MG/L) | DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) | DIS- SOLVED SOLIDS (TONS PER AC-FT) |
|---|---|---|---|---|---|---|---|---|---|
| NOV. 04... | 0 | 152 | 5.4 | 1.9 | .1 | .00 | .00 | -- | -- |
| DEC. 10... | 0 | 47 | 4.8 | 1.4 | .1 | .03 | .07 | -- | -- |
| JAN. 11... | 0 | 124 | 18 | 1.2 | .0 | .00 | .08 | -- | -- |
| FEB. 16... | 0 | 144 | 5.8 | 1.8 | .0 | .02 | .00 | -- | -- |
| MAR. 22... | 0 | 151 | 7.4 | 3.1 | .0 | .00 | .08 | -- | -- |
| MAY 05... | 0 | 115 | 5.7 | 1.4 | .0 | .11 | .16 | 139 | .19 |
| JUNE 09... | 0 | 141 | 5.2 | 2.2 | .0 | .09 | .00 | 155 | .21 |
| JULY 20... | 0 | 141 | 4.4 | 2.4 | .0 | .00 | .23 | -- | -- |
| AUG. 25... | 0 | 143 | 7.3 | 1.7 | .0 | .04 | .01 | -- | -- |
| SEP. 27... | 0 | 144 | 4.4 | 1.3 | .0 | -- | .00 | 167 | .23 |

| DATE | DIS- SOLVED SOLIDS (TONS PER DAY) | HARD- NESS (CA,MG) (MG/L) | NON- CAR- BONATE HARD- NESS (MG/L) | PERCENT SODIUM | SODIUM AD- SORP- TION RATIO | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) | PH (UNITS) | COLOR (PLAT- INUM- COBALT UNITS) | BIO- CHEM- ICAL OXYGEN DEMAND (MG/L) |
|---|---|---|---|---|---|---|---|---|---|
| NOV. 04... | -- | 160 | 3 | 3 | .1 | 301 | 7.6 | 7 | .5 |
| DEC. 10... | -- | 52 | 6 | 3 | .1 | 103 | 7.5 | 35 | 1.8 |
| JAN. 11... | -- | 140 | 14 | 2 | .0 | 246 | 8.3 | 1 | 1.0 |
| FEB. 16... | -- | 140 | 0 | 3 | .1 | 292 | 8.2 | 5 | .5 |
| MAR. 22... | -- | 160 | 6 | 2 | .0 | 298 | 8.1 | 5 | .8 |
| MAY 05... | 24.4 | 120 | 6 | 2 | .0 | 231 | 8.2 | 5 | 1.5 |
| JUNE 09... | 2.43 | 140 | 0 | 3 | .1 | -- | -- | 5 | .8 |
| JULY 20... | -- | 140 | 2 | 2 | .0 | 280 | 8.1 | 2 | -- |
| AUG. 25... | -- | 150 | 6 | 2 | .1 | 291 | 8.0 | 2 | 1.1 |
| SEP. 27... | 2.39 | 140 | 0 | 3 | .1 | 309 | 8.0 | 2 | .5 |

07060710 NORTH SYLAMORE CREEK NEAR FIFTY SIX, ARK.--continued
(Hydrologic bench-mark station)

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DIS-SOLVED ARSENIC (AS) (UG/L) | DIS-SOLVED CAD-MIUM (CD) (UG/L) | HEXA-VALENT CHRO-MIUM (CR6) (UG/L) | DIS-SOLVED COBALT (CO) (UG/L) | DIS-SOLVED COPPER (CU) (UG/L) | DIS-SOLVED LEAD (PB) (UG/L) | DIS-SOLVED LITHIUM (LI) (UG/L) | TOTAL MERCURY (HG) (UG/L) | DIS-SOLVED MERCURY (HG) (UG/L) | DIS-SOLVED NICKEL (NI) (UG/L) | DIS-SOLVED SILVER (AG) (UG/L) | DIS-SOLVED ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV. 04... | <10 | 0 | <10 | 0 | 3 | 0 | 0 | .6 | <.5 | 2 | 0 | 20 |
| DEC. 10... | -- | -- | -- | -- | -- | -- | -- | -- | .6 | -- | -- | -- |
| MAY 05... | <10 | 0 | <10 | 1 | 5 | 1 | -- | -- | -- | 0 | -- | 40 |

## FIELD ANALYSES

| DATE | MEAN DIS-CHARGE (CFS) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | DIS-SOLVED OXYGEN (MG/L) | PER-CENT SATUR-ATION | IMME-DIATE COLI-FORM (COL. PER 100 ML) | FECAL COLI-FORM (COL. PER 100 ML) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV. 04... | 4.0 | 188 | 0 | 154 | 300 | 8.2 | 10.0 | 10.0 | 88 | -- | -- |
| DEC. 10... | 2270 | -- | -- | -- | 103 | -- | 12.0 | 9.3 | 86 | 250 | -- |
| JAN. 11... | 14 | 152 | 8 | 138 | 290 | 8.8 | 8.0 | 11.5 | 97 | 25 | -- |
| FEB. 16... | 9.4 | 176 | 0 | 144 | 305 | 8.1 | 7.5 | 11.0 | 92 | -- | -- |
| MAR. 22... | 5.8 | 168 | 4 | 144 | 310 | 8.4 | 12.0 | 9.0 | 83 | 10 | -- |
| MAY 05... | 65 | -- | -- | -- | 242 | -- | 12.5 | 9.0 | 85 | 10 | -- |
| JUNE 09... | 5.8 | -- | -- | -- | 285 | -- | 25.0 | 7.2 | 87 | 25 | -- |
| JULY 20... | 5.4 | 172 | 0 | 141 | 289 | 8.2 | 28.0 | 6.8 | 86 | 150 | <3 |
| AUG. 25... | 3.5 | 172 | 0 | 141 | 286 | 7.8 | 23.0 | 6.5 | 75 | 120 | 45 |
| SEP. 27... | 5.3 | -- | -- | -- | 280 | 7.9 | 21.5 | 7.8 | 88 | E160 | 7 |

## SUSPENDED-SEDIMENT CONCENTRATIONS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | SUS-PENDED SEDI-MENT (MG/L) |
|---|---|
| NOV. 04... | 7 |
| DEC. 10... | 106 |
| JAN. 11... | 5 |
| FEB. 16... | 2 |
| MAR. 22... | 4 |
| MAY 05... | 2 |
| JUNE 09... | 2 |
| JULY 20... | 4 |
| AUG. 25... | 6 |
| SEP. 27... | 9 |

< LESS THAN.
E ESTIMATED.

## 07064000 BLACK RIVER NEAR CORNING, ARK.

LOCATION.--Lat 36°24'07", long 90°32'29", in SW¼NE¼ sec.4, T.20 N., R.5 E., Clay County, at gaging station near left bank on downstream side of bridge on U.S. Highway 62, 2.2 miles east of Corning, 11.9 miles downstream from Cane Creek, and at mile 152.2.

DRAINAGE AREA.--1,749 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1946 to September 1960, October 1965 to September 1966, October 1970 to September 1972.
Water temperature: October 1956 to September 1959.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 6 | 371 | | | | | 140 | | 4 | | |
| OCT. 20 | 310 | | | | | 151 | | 4 | | |
| NOV. 2 | 325 | | | 30.4 | 20.4 | 156 | 10 | 4 | 0.200 | 0.100 |
| NOV. 16 | 328 | | | | | 155 | | 11 | | |
| DEC. 1 | 440 | | | | | 144 | | 4 | | |
| DEC. 15 | 1130 | | | | | 62 | | 3 | | |
| JAN. 17 | 781 | | | | | 106 | | 4 | | |
| FEB. 1 | 894 | 600 | 100.0K | 21.6 | 10.2 | 53 | 8 | | 0.500 | 0.400 |
| FEB. 15 | 948 | | | | | 101 | | 4 | | |
| MAR. 1 | 2040 | | | | | 74 | | 2 | | |
| MAR. 15 | 982 | | | | | 26 | | 4 | | |
| APR. 5 | 776 | | | | | 110 | | 5 | | |
| APR. 17 | 2510 | | | | | 41 | | 5 | | |
| MAY 2 | | | | 15.2 | 6.7 | 61 | 10 | 2 | 0.300 | 0.040 |
| MAY 16 | 3620 | | | | | 66 | | 3 | | |
| JUNE 7 | 816 | | | | | 111 | | 7 | | |
| JUNE 21 | 587 | | | | | 120 | | 4 | | |
| JULY 5 | 1440 | | | | | 42 | | 5 | | |
| JULY 17 | 634 | | | | | 119 | | 4 | | |
| AUG. 1 | 1570 | 1200 | 200.0 | 7.0 | 10.0 | 72 | | 3 | 0.600 | 0.160 |
| AUG. 15 | 614 | | | | | 129 | | 5 | | |
| SEP. 6 | 536 | | | | | 98 | | 3 | | |
| SEP. 20 | 394 | | | | | 137 | | 5 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT VOLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 6 | | | | | | 312 | 8.20 | 22.0 | | |
| OCT. 20 | | | | | | 253 | 8.30 | 19.0 | | 50.0 |
| NOV. 2 | 182 | 21 | 203 | 160 | 76.0 | 290 | 8.30 | 17.0 | 0 | 30.0 |
| NOV. 16 | | | | | | 232 | 8.30 | 13.0 | | 25.0K |
| DEC. 1 | | | | | | 212 | 8.30 | 6.0 | | 25.0K |
| DEC. 15 | | | | | | 153 | 7.60 | 12.0 | | 120.0 |
| JAN. 17 | | | | | | 208 | 8.00 | 0.0 | | 25.0K |
| FEB. 1 | 66 | 25 | 139 | 98 | 54.0 | | | | 30 | 25.0K |
| FEB. 15 | | | | | | 176 | 8.10 | 7.0 | | 50.0 |
| MAR. 1 | | | | | | 120 | 7.40 | 13.0 | | 40.0 |
| MAR. 15 | | | | | | 100 | 7.00 | 13.0 | | 35.0 |
| APR. 5 | | | | | | 108 | 7.50 | 10.0 | | 25.0K |
| APR. 17 | | | | | | 109 | 7.10 | 16.0 | | 170.0 |
| MAY 2 | 127 | 62 | 169 | 76 | 38.0 | 133 | 6.90 | 18.0 | 60 | 60.0 |
| MAY 16 | | | | | | 140 | 7.50 | 18.0 | | 25.0K |
| JUNE 7 | | | | | | 243 | 7.60 | 25.0 | | 25.0K |
| JUNE 21 | | | | | | 202 | 7.80 | 25.0 | | 80.0 |
| JULY 5 | | | | | | 77 | 7.00 | 23.0 | | 600.0 |
| JULY 17 | | | | | | 235 | 8.60 | 27.0 | | 120.0 |
| AUG. 1 | 120 | 102 | 222 | 60 | 18.0 | 100 | 7.20 | 28.0 | 120 | 160.0 |
| AUG. 15 | | | | | | 232 | 7.90 | 28.0 | | 44.0 |
| SEP. 6 | | | | | | 209 | 7.90 | 25.0 | | 95.0 |
| SEP. 20 | | | | | | 265 | 8.00 | 27.0 | | 50.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MPN-MCON /100ML | TOT COLI MPINMEDC /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 6 | 8.1 | | 1.3 | | | |
| OCT. 20 | 8.1 | | 0.5 | | | |
| NOV. 2 | 8.8 | | 1.4 | | | |
| NOV. 16 | 9.4 | | 1.6 | | | |
| DEC. 1 | 11.5 | | 1.5 | | | |
| DEC. 15 | 9.5 | | 1.6 | | | |
| JAN. 17 | 13.1 | | 2.8 | | | |
| FEB. 1 | 12.4 | | 2.3 | 4K | 4K | 213 |
| FEB. 15 | 11.5 | | 2.2 | | | |
| MAR. 1 | 9.7 | | 1.2 | | | |
| MAR. 15 | 7.0 | | 0.7 | | | |
| APR. 5 | 9.5 | | 0.9 | | | |
| APR. 17 | 8.3 | | 2.6 | | | |
| MAY 2 | 8.8 | | 1.4 | 370 | | |
| MAY 16 | | | 0.7 | | | |
| JUNE 7 | 6.9 | | 1.4 | | | |
| JUNE 21 | 7.0 | | 0.8 | | | |
| JULY 5 | 5.7 | 68.0 | 2.1 | | | |
| JULY 17 | 6.9 | 85.0 | 1.0 | | | |
| AUG. 1 | 6.4 | 81.0 | 1.4 | | 10000 | 430 |
| AUG. 15 | 8.4 | 102.0 | 2.0 | | | |
| SEP. 6 | 7.0 | 88.0 | 1.4 | | | |
| SEP. 20 | 6.5 | 80.0 | 1.3 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 1 | | 2K | 100K | | 10K | 60K | | 50K | 10 |
| SEP. 20 | | | | | | | | | |

K Less than.

## 07068850 CURRENT RIVER NEAR POCAHONTAS, ARK.

LOCATION.--Lat 36°17'53", long 90°51'26", in SE¼SE¼ sec.10, T.19 N., R.2 E., Randolph County, at bridge on U.S. Highway 67, 5.5 miles northeast of Pocahontas.

PERIOD OF RECORD.--Chemical analyses: October 1954 to September 1958, October 1970 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 6 | 1100 | | | | | 106 | | 6 | | |
| OCT. 20 | 1000 | | | | | 101 | | 3 | | |
| NOV. 2 | 1000 | | | | | 102 | | 3 | | |
| NOV. 16 | 1300 | 50 | 100.0 | 39.0 | 23.0 | 106 | 6 | 4 | 0.100K | 0.010K |
| DEC. 1 | 1300 | | | | | 107 | | 3 | | |
| DEC. 15 | 7000 | | | | | 121 | | 3 | | |
| JAN. 17 | 1400 | | | | | 140 | | 1 | | |
| FEB. 1 | 1600 | | | | | 143 | | 4 | | |
| FEB. 15 | 1600 | 100K | 100.0K | 32.0 | 23.0 | 157 | 8 | 3 | 0.100 | 0.060 |
| MAR. 1 | 2700 | | | | | 137 | | 3 | | |
| MAR. 15 | 2300 | | | | | 145 | | 6 | | |
| APR. 5 | 1500 | | | | | 155 | | 5 | | |
| APR. 17 | 3200 | | | | | 113 | | 3 | | |
| MAY 2 | 9600 | | | | | 78 | | 3 | | |
| MAY 16 | 3900 | | | 26.4 | 14.0 | 112 | 6 | 2 | 0.200 | 0.034 |
| JUNE 7 | 2500 | | | | | 140 | | 3 | | |
| JUNE 21 | 1700 | | | | | 152 | | 3 | | |
| JULY 5 | 1400 | | | | | 155 | | 0 | | |
| JULY 17 | 1500 | | | | | 144 | | 4 | | |
| AUG. 1 | 1700 | | | | | 154 | | 3 | | |
| AUG. 15 | 1400 | 220 | 70.0 | 34.0 | 20.0 | 160 | 18 | 6 | 0.100K | 0.030 |
| SEP. 6 | 1200 | | | | | 162 | | 3 | | |
| SEP. 20 | 1200 | | | | | 162 | | | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT VOLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 6 | | | | | | 344 | 8.40 | | | |
| OCT. 20 | | | | | | 285 | 8.40 | 19.0 | | 25.0K |
| NOV. 2 | | | | | | 285 | 8.40 | 17.0 | | 25.0K |
| NOV. 16 | 185 | 7 | 192 | 192 | 96.0 | 277 | 8.40 | 15.0 | 0 | 25.0K |
| DEC. 1 | | | | | | 263 | 8.30 | 9.0 | | 25.0K |
| DEC. 15 | | | | | | 204 | 7.90 | 11.0 | | 55.0 |
| JAN. 17 | | | | | | 263 | 8.10 | 6.0 | | 25.0K |
| FEB. 1 | | | | | | 212 | 8.30 | 5.0 | | 25.0K |
| FEB. 15 | 155 | 7 | 162 | 176 | 80.0 | 238 | 8.50 | | 0 | 25.0K |
| MAR. 1 | | | | | | 215 | 8.20 | 13.0 | | 25.0K |
| MAR. 15 | | | | | | 250 | 8.40 | 14.0 | | 25.0K |
| APR. 5 | | | | | | 240 | 7.80 | 10.0 | | 25.0K |
| APR. 17 | | | | | | 244 | 7.80 | 17.0 | | 40.0 |
| MAY 2 | | | | | | 156 | 7.10 | 17.0 | | 120.0 |
| MAY 16 | 144 | 85 | 229 | 124 | 66.0 | 227 | 7.00 | 14.0 | 10 | 25.0K |
| JUNE 7 | | | | | | 250 | 8.10 | 23.0 | | 25.0K |
| JUNE 21 | | | | | | 230 | 7.90 | 26.0 | | 25.0K |
| JULY 5 | | | | | | 270 | 8.10 | 23.3 | | 25.0K |
| JULY 17 | | | | | | 267 | 7.20 | 23.0 | | 110.0 |
| AUG. 1 | | | | | | 248 | 8.10 | 24.0 | | 25.0K |
| AUG. 15 | 167 | 10 | 177 | 168 | 84.0 | 234 | 8.10 | 27.0 | 5 | 16.0 |
| SEP. 6 | | | | | | 278 | 8.30 | 22.0 | | 55.0 |
| SEP. 20 | | | | | | | 8.10 | | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MPN-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 6 | 9.2 | | 0.7 | | | |
| OCT. 20 | 9.2 | | 1.1 | | | |
| NOV. 2 | 9.9 | | 1.3 | | | |
| NOV. 16 | 10.2 | | 1.1 | 4K | 110 | 4K |
| DEC. 1 | 12.0 | | 1.6 | | | |
| DEC. 15 | 9.6 | | 1.3 | | | |
| JAN. 17 | 13.5 | | 2.0 | | | |
| FEB. 1 | 13.1 | | 1.5 | | | |
| FEB. 15 | 11.9 | | 1.4 | | | |
| FEB. 16 | | | | 4K | 4K | 4K |
| MAR. 1 | 10.1 | | 0.5 | | | |
| MAR. 15 | 9.3 | | 0.7 | | | |
| APR. 5 | 10.0 | | 0.9 | | | |
| APR. 17 | 7.5 | | 2.1 | | | |
| MAY 2 | 8.7 | | 7.3 | | | |
| MAY 16 | 7.7 | | | 3K | 10K | 5 |
| JUNE 7 | 7.9 | | 1.1 | | | |
| JUNE 21 | 8.0 | | 1.0 | | | |
| JULY 5 | 8.7 | 100.0 | 1.1 | | | |
| JULY 17 | 8.3 | 95.0 | 1.3 | | | |
| AUG. 1 | 8.3 | 98.0 | 0.4 | | | |
| AUG. 15 | 8.7 | 107.0 | 1.2 | 71 | 225 | 68 |
| SEP. 6 | 9.0 | 102.0 | 0.9 | | | |
| SEP. 20 | | 104.0 | 1.5 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 15 | | 2K | 50K | | 10K | 100K | | 50K | 2K |
| SEP. 20 | | | | | | | | | |

K Less than.

## 07068867 FOURCHE RIVER NEAR MIDDLEBROOK, ARK.

LOCATION.--Lat 36°28'50", long 90°56'01", Randolph County, at end of private road 0.9 mile west of State Highway 115, 0.7 mile south of Missouri-Arkansas State line, and 1.5 miles north of Middlebrook.

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1972.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DISCHARGE (CFS) | DISSOLVED SILICA (SIO2) (MG/L) | DISSOLVED IRON (FE) (UG/L) | DISSOLVED MANGANESE (MN) (UG/L) | DISSOLVED CALCIUM (CA) (MG/L) | DISSOLVED MAGNESIUM (MG) (MG/L) | DISSOLVED SODIUM (NA) (MG/L) | DISSOLVED POTASSIUM (K) (MG/L) | BICARBONATE (HCO3) (MG/L) | CARBONATE (CO3) (MG/L) | ALKALINITY AS CACO3 (MG/L) | DISSOLVED SULFATE (SO4) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV. 12: 08... | 60 | 3.7 | 20 | 20 | 44 | 26 | 1.8 | 1.0 | 264 | 0 | 216 | 6.6 |
| MAY 03... | 352 | 7.8 | 30 | 20 | 36 | 18 | 1.6 | .9 | 192 | 0 | 157 | 6.0 |
| JULY 25... | 50 | 8.3 | 0 | 10 | 42 | 23 | 2.4 | 2.2 | 244 | 0 | 200 | 4.4 |
| SEP. 08... | 60 | 3.7 | 20 | 20 | 44 | 26 | 1.8 | 1.0 | 264 | 0 | 216 | 6.6 |
| MAY 03... | 352 | 7.8 | 30 | 20 | 36 | 18 | 1.6 | .9 | 192 | 0 | 157 | 6.0 |
| JULY 25... | 50 | 8.3 | 0 | 10 | 42 | 23 | 2.4 | 2.2 | 244 | 0 | 200 | 4.4 |
| SEP. 25... | 42 | 9.1 | 30 | 40 | 50 | 26 | 2.0 | 1.3 | 284 | 0 | 233 | 5.3 |

| DATE | DISSOLVED CHLORIDE (CL) (MG/L) | DISSOLVED FLUORIDE (F) (MG/L) | DISSOLVED NITRATE (N) (MG/L) | DISSOLVED AMMONIA NITROGEN (N) (MG/L) | ORGANIC NITROGEN (N) (MG/L) | TOTAL PHOSPHORUS (P) (MG/L) | DISSOLVED-PHOSPHORUS (P) (MG/L) | DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) | DISSOLVED SOLIDS (TONS PER AC-FT) | DISSOLVED SOLIDS (TONS PER DAY) | HARDNESS (CA,MG) (MG/L) | NON-CARBONATE HARDNESS (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV. 16... | 3.9 | .0 | .00 | .00 | .03 | .00 | .00 | 278 | .38 | 6.91 | 270 | 3 |
| JAN. 04... | 2.9 | .0 | .60 | .00 | .00 | .02 | .01 | 222 | .30 | 24.0 | 220 | 14 |
| MAR. 08... | 2.9 | .1 | .36 | .00 | .08 | .05 | .01 | 209 | .28 | 33.9 | 220 | 0 |
| MAY 03... | 2.6 | .0 | .11 | .01 | .04 | .45 | .01 | 161 | .22 | 153 | 160 | 6 |
| JULY 25... | 3.0 | .4 | .32 | .02 | .10 | .22 | .12 | 200 | .27 | 27.0 | 200 | 0 |
| SEP. 25... | 2.8 | .2 | .14 | .00 | .02 | .02 | .01 | 225 | .31 | 25.5 | 230 | 0 |

| DATE | PERCENT SODIUM | SODIUM ADSORPTION RATIO | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | COLOR (PLATINUM-COBALT UNITS) | DISSOLVED OXYGEN (MG/L) | PERCENT SATURATION | CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) | FECAL COLIFORM (COL. PER 100 ML) | STREPTOCOCCI (COLONIES PER 100 ML) | METHYLENE BLUE ACTIVE SUBSTANCE (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV. 16... | 2 | .1 | 530 | 7.7 | 14.0 | 5 | 7.0 | 67 | 0 | 20 | 260 | .01 |
| JAN. 04... | 2 | .1 | 365 | 8.1 | 6.5 | 8 | 9.8 | 80 | 0 | 800 | 11000 | .03 |
| MAR. 08... | 2 | .1 | 400 | 8.3 | 10.0 | 5 | 7.5 | 66 | 4 | 20 | 84 | .02 |
| MAY 03... | 2 | .1 | 300 | 8.0 | 14.0 | 5 | 8.9 | 86 | 0 | 290 | 660 | .03 |
| JULY 25... | 3 | .1 | 380 | 7.8 | 27.0 | 10 | 5.6 | 70 | 18 | 2300 | 8600 | .02 |
| SEP. 25... | 2 | .1 | 415 | 8.2 | 21.0 | 10 | 6.5 | 72 | 5 | 2500 | 8400 | .03 |

| DATE | DISSOLVED CADMIUM (CD) (UG/L) | DISSOLVED CHROMIUM (CR) (UG/L) | DISSOLVED COBALT (CO) (UG/L) | DISSOLVED COPPER (CU) (UG/L) | DISSOLVED LEAD (PB) (UG/L) | DISSOLVED NICKEL (NI) (UG/L) | DISSOLVED SILVER (AG) (UG/L) | DISSOLVED ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|---|
| JAN. 04... | 0 | 0 | 0 | 140 | 10 | 32 | 2 | 340 |

## 07069170 SPRING RIVER NEAR THAYER, MO.

LOCATION.--Lat 36°30'10", long 91°31'31", in SE¼SE¼ sec.5, T.21 N., R.5 W., Oregon County, at bridge on county road, 0.6 mile east of U.S. Highway 63, 0.2 mile north of Missouri-Arkansas State line, and 1.1 miles southeast of Thayer.

PERIOD OF RECORD.--Chemical analyses: December 1971 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| DEC. 1 | | | | | | 282 | | 7 | | |
| JAN. 17 | | | | | | 238 | | 5 | | |
| FEB. 1 | | | | | | 246 | | 3 | | |
| FEB. 15 | | 100K | 100.0K | 48.0 | 32.0 | 243 | 2 | 3 | 0.300 | 0.030K |
| MAR. 1 | | | | | | 246 | | 3 | | |
| MAR. 15 | | | | | | 246 | | 2 | | |
| APR. 5 | | | | | | 236 | | 4 | | |
| APR. 17 | | | | | | 244 | | 3 | | |
| MAY 1 | | | | | | 171 | | 2 | | |
| MAY 16 | | | | 49.0 | 25.0 | 196 | 4 | 2 | 0.400 | 0.020 |
| JUNE 7 | | | | | | 225 | | 2 | | |
| JUNE 21 | | | | | | 248 | | 3 | | |
| JULY 5 | | | | | | 257 | | 7 | | |
| JULY 17 | | | | | | 227 | | 3 | | |
| AUG. 1 | | | | | | 247 | | 5 | | |
| AUG. 15 | | 100 | 200.0 | 52.0 | | 241 | 5 | 5 | 0.200 | 0.020 |
| SEP. 6 | | | | | | 250 | | 3 | | |
| SEP. 20 | | | | | | 259 | | 4 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| DEC. 1 | | | | | | 420 | 8.00 | 8.0 | | 25.0K |
| JAN. 17 | | | | | | 400 | 8.10 | | | 25.0K |
| FEB. 1 | | | | | | 400 | 8.40 | 0.0 | | 25.0K |
| FEB. 15 | 235 | 0 | 235 | 252 | 120.0 | 357 | 8.40 | 10.0 | 0 | 25.0K |
| MAR. 1 | | | | | | 370 | 8.30 | 13.0 | | 25.0K |
| MAR. 15 | | | | | | 416 | 8.30 | 15.0 | | 25.0K |
| APR. 5 | | | | | | 374 | 8.10 | | | 25.0K |
| APR. 17 | | | | | | 488 | 8.10 | 15.0 | | 25.0K |
| MAY 1 | | | | | | 312 | 7.60 | 17.0 | | 30.0 |
| MAY 16 | 234 | 13 | 247 | 226 | 122.0 | 360 | 8.10 | 27.0 | 10 | 25.0K |
| JUNE 7 | | | | | | 400 | 8.10 | 22.0 | | 25.0K |
| JUNE 21 | | | | | | 345 | 8.00 | 23.0 | | 25.0K |
| JULY 5 | | | | | | 402 | 8.00 | 21.0 | | 25.0K |
| JULY 17 | | | | | | 392 | 7.10 | 23.0 | | 25.0K |
| AUG. 1 | | | | | | 348 | 7.90 | 24.0 | | 25.0K |
| AUG. 15 | 11 | 253 | 264 | 268 | 130.0 | 342 | 8.00 | 25.0 | 5 | 14.0 |
| SEP. 6 | | | | | | 467 | 8.00 | 23.0 | | 25.0K |
| SEP. 20 | | | | | | 426 | 7.80 | 26.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| DEC. 1 | 12.3 | | 2.5 | | | |
| JAN. 17 | 14.2 | | 2.3 | | | |
| FEB. 1 | 13.7 | | 1.7 | | | |
| FEB. 15 | 13.5 | | 1.6 | | | |
| FEB. 16 | | | | 7 | 145 | 13 |
| MAR. 1 | 11.3 | | 1.5 | | | |
| MAR. 15 | 10.4 | | 1.6 | | | |
| APR. 5 | 12.1 | | 2.3 | | | |
| APR. 17 | 10.0 | | 2.0 | | | |
| MAY 1 | 9.4 | | 2.8 | | | |
| MAY 16 | 9.5 | | 1.5 | 134 | 220 | 120 |
| JUNE 7 | 8.4 | | 1.0 | | | |
| JUNE 21 | 8.1 | | 1.4 | | | |
| JULY 5 | 8.4 | 93.0 | 2.8 | | | |
| JULY 17 | 8.8 | 101.0 | 2.2 | | | |
| AUG. 1 | 9.2 | | 1.9 | | | |
| AUG. 15 | 9.9 | | 4.0 | 148 | 600 | 140 |
| SEP. 6 | 9.0 | | 2.0 | | | |
| SEP. 20 | 8.0 | | 2.1 | | | |

K Less than.

## 07069260 MYATT CREEK NEAR LANTON, MO.

LOCATION.--Lat 36°31'04", long 91°44'18", on line between secs.4 and 33, T.22 N., R.7 W., Howell County, at bridge on Missouri State Highway 142, 3.5 miles east of Lanton.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 6 | 0 | | | | | 259 | | 6 | | |
| OCT. 20 | 0 | | | | | 240 | | 4 | | |
| NOV. 2 | 0 | | | | | 250 | | 2 | | |
| NOV. 16 | 0 | 100 | 200.0 | 46.4 | 34.0 | 250 | 4 | 3 | 0.100K | 0.010K |
| DEC. 1 | 0 | | | | | 238 | | 6 | | |
| DEC. 15 | | | | | | 49 | | | | |
| JAN. 17 | 17 | | | | | 234 | | 3 | | |
| FEB. 1 | 17 | | | | | 247 | | 3 | | |
| FEB. 15 | 8 | 100K | 100.0K | 49.6 | 33.0 | 248 | 7 | 1 | 0.800 | 0.030K |
| MAR. 1 | | | | | | 243 | | 2 | | |
| MAR. 2 | 4 | | | | | | | | | |
| MAR. 15 | 29 | | | | | 233 | | 3 | | |
| APR. 5 | 22 | | | | | 201 | | 3 | | |
| APR. 17 | 2 | | | | | 237 | | 3 | | |
| MAY 1 | | | | | | 126 | | 2 | | |
| MAY 16 | 4 | | | 45.0 | 28.0 | 209 | 6 | 2 | 0.400 | 0.014 |
| JUNE 7 | 2 | | | | | 239 | | 3 | | |
| JUNE 21 | 0 | | | | | 258 | | 3 | | |
| JULY 5 | 3 | | | | | 270 | | 7 | | |
| JULY 17 | 45 | | | | | 246 | | 4 | | |
| AUG. 1 | 0 | | | | | 258 | | 5 | | |
| AUG. 15 | 0 | 100 | 130.0 | 54.0 | 35.0 | 259 | 1K | 3 | 0.200 | 0.020 |
| SEP. 6 | 0 | | | | | 255 | | 3 | | |
| SEP. 20 | 0 | | | | | 249 | | 5 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 6 | | | | | | 476 | 8.20 | | | |
| OCT. 20 | | | | | | 384 | 8.10 | 20.0 | | 25.0K |
| NOV. 2 | | | | | | 357 | 8.10 | 16.0 | | 25.0K |
| NOV. 16 | 199 | 45 | 244 | 256 | 116.0 | 384 | 8.30 | 15.0 | 5 | 25.0K |
| DEC. 1 | | | | | | 363 | 8.30 | 7.0 | | 25.0K |
| DEC. 15 | | | | | | 80 | 7.60 | 13.0 | | 220.0 |
| JAN. 17 | | | | | | 384 | 8.00 | 2.0 | | 25.0K |
| FEB. 1 | | | | | | 416 | 8.30 | 1.0 | | 25.0K |
| FEB. 15 | 245 | 4 | 249 | 260 | 124.0 | 363 | 8.20 | 11.0 | 0 | 25.0K |
| MAR. 1 | | | | | | 377 | 8.30 | 14.0 | | 25.0K |
| MAR. 15 | | | | | | 400 | 8.30 | 15.0 | | 25.0K |
| APR. 5 | | | | | | 310 | 8.20 | 10.0 | | 25.0K |
| APR. 17 | | | | | | 495 | 8.20 | 15.0 | | 25.0K |
| MAY 1 | | | | | | 217 | 7.60 | 17.0 | | 25.0K |
| MAY 16 | 236 | 22 | 258 | 228 | 112.0 | 388 | 8.00 | 14.0 | 5 | 25.0K |
| JUNE 7 | | | | | | 392 | 7.90 | 23.0 | | 25.0K |
| JUNE 21 | | | | | | 366 | 8.00 | 24.0 | | 25.0K |
| JULY 5 | | | | | | 417 | 8.00 | 23.0 | | 25.0K |
| JULY 17 | | | | | | 417 | 7.10 | 28.0 | | 25.0K |
| AUG. 1 | | | | | | 400 | 8.00 | 25.0 | | 25.0K |
| AUG. 15 | 262 | 8 | 270 | 276 | 134.0 | 390 | 8.00 | 26.0 | 5 | 16.0 |
| SEP. 6 | | | | | | 459 | 8.10 | 22.0 | | 25.0K |
| SEP. 20 | | | | | | 444 | 7.90 | 27.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 6 | 8.9 | | 1.5 | | | |
| OCT. 20 | 7.9 | | 2.6 | | | |
| NOV. 2 | 14.3 | | 9.0 | | | |
| NOV. 16 | 10.2 | | 2.3 | 4K | 44 | 13 |
| DEC. 1 | 12.4 | | 2.4 | | | |
| DEC. 15 | 9.6 | | 3.5 | | | |
| JAN. 17 | 13.1 | | 1.2 | | | |
| FEB. 1 | 12.0 | | 1.3 | | | |
| FEB. 15 | 11.4 | | 0.8 | | | |
| FEB. 16 | | | | 4K | 4K | 4K |
| MAR. 1 | 10.0 | | 0.7 | | | |
| MAR. 15 | 9.4 | | 1.1 | | | |
| APR. 5 | 10.2 | | 1.3 | | | |
| APR. 17 | 9.3 | | 0.7 | | | |
| MAY 1 | 9.4 | | 8.4 | | | |
| MAY 16 | | | 1.4 | 0 | 60 | 0 |
| JUNE 7 | 7.0 | | 0.5 | | | |
| JUNE 21 | 7.6 | | 2.4 | | | |
| JULY 5 | 7.0 | 80.0 | 0.8 | | | |
| JULY 17 | 7.2 | 91.0 | 1.8 | | | |
| AUG. 1 | 7.1 | 85.0 | 0.9 | | | |
| AUG. 15 | 8.0 | 98.0 | 2.4 | 32 | 225 | 116 |
| SEP. 6 | 8.1 | 92.0 | 1.3 | | | |
| SEP. 20 | 6.5 | 80.0 | 1.4 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 15 | | 2K | 50K | | 10K | 100K | | 50K | 2K |
| SEP. 20 | | | | | | | | | |

K Less than.

## 07069268 SOUTH FORK OF SPRING RIVER NEAR MOKO, ARK.

LOCATION.--Lat 36°26'23", long 91°49'44", in SE¼NW¼ sec.34, T.21 N., R.8 W., Fulton County, at bridge on State Highway 395, 0.2 mile upstream from Mill Creek, and 2 miles south of Moko.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 6 | | | | | | 248 | | 4 | | |
| NOV. 2 | | | | | | 260 | | 2 | | |
| NOV. 16 | 12 | 200 | 200.0 | 46.4 | 38.8 | 261 | 8 | 2 | 0.100K | 0.010K |
| DEC. 1 | 15 | | | 60.0 | 27.0 | 256 | 4 | 4 | 0.100K | 0.100K |
| DEC. 15 | | | | | | 57 | | 3 | | |
| JAN. 17 | | | | | | 226 | | 1 | | |
| FEB. 1 | | | | | | 212 | | 2 | | |
| FEB. 15 | | 100K | 100.0K | 45.6 | 21.8 | 195 | 3 | 3 | 0.400 | 0.600 |
| MAR. 1 | | | | | | 221 | | 2 | | |
| MAR. 15 | | | | | | 218 | | 4 | | |
| APR. 5 | | | | | | 207 | | 3 | | |
| APR. 17 | 81 | | | | | 167 | | 3 | | |
| MAY 1 | | | | | | 122 | | 2 | | |
| MAY 16 | 20 | | | 38.0 | 30.0 | 156 | 5 | 2 | 0.100K | 0.020 |
| JUNE 7 | 25 | | | | | 232 | | 2 | | |
| JUNE 21 | | | | | | 235 | | 3 | | |
| JULY 5 | | | | | | 240 | | 5 | | |
| JULY 17 | | | | | | 164 | | 3 | | |
| AUG. 1 | | | | | | 238 | | 4 | | |
| AUG. 15 | | 100 | 140.0 | 45.0 | 29.0 | 222 | 1K | 4 | 0.300 | 0.060 |
| SEP. 6 | | | | | | 240 | | 3 | | |
| SEP. 20 | | | | | | 236 | | 3 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 6 | | | | | | 455 | 8.20 | | | |
| NOV. 2 | | | | | | 384 | 8.00 | 14.0 | | 25.0K |
| NOV. 16 | 261 | 4 | 265 | 276 | 116.0 | 384 | 8.20 | 14.0 | 5 | 25.0K |
| DEC. 1 | 250 | 9 | 259 | 262 | 150.0 | 400 | 8.20 | 6.0 | 0 | 25.0K |
| DEC. 15 | | | | | | 95 | 7.70 | 13.0 | | 220.0 |
| JAN. 17 | | | | | | 370 | 8.20 | 2.0 | | 25.0K |
| FEB. 1 | | | | | | 357 | 8.40 | 2.0 | | 25.0K |
| FEB. 15 | 192 | 5 | 197 | 204 | 114.0 | 294 | 8.30 | 8.0 | 0 | 25.0K |
| MAR. 1 | | | | | | 338 | 8.30 | 14.0 | | 25.0K |
| MAR. 15 | | | | | | 377 | 8.30 | 15.0 | | 25.0K |
| APR. 5 | | | | | | 318 | 8.10 | 14.0 | | 25.0K |
| APR. 17 | | | | | | 350 | 8.00 | 16.0 | | 25.0K |
| MAY 1 | | | | | | 215 | 7.60 | 16.0 | | 25.0K |
| MAY 16 | 222 | 28 | 250 | 216 | 94.0 | 370 | 8.10 | 15.0 | 5 | 25.0K |
| JUNE 7 | | | | | | 404 | 8.20 | 23.0 | | 25.0K |
| JUNE 21 | | | | | | 365 | 8.10 | 24.0 | | 25.0K |
| JULY 5 | | | | | | 345 | 8.10 | 24.0 | | 25.0K |
| JULY 17 | | | | | | 303 | 7.20 | 27.0 | | 45.0 |
| AUG. 1 | | | | | | 382 | 8.10 | 27.0 | | 25.0K |
| AUG. 15 | 226 | 48 | 274 | 232 | 112.0 | 311 | 8.00 | 25.0 | 15 | 12.0 |
| SEP. 6 | | | | | | 358 | 8.20 | 22.0 | | 25.0K |
| SEP. 20 | | | | | | 413 | 8.10 | 29.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 6 | 8.1 | | 0.9 | | | |
| NOV. 2 | 9.9 | | 5.9 | | | |
| NOV. 16 | 7.8 | | 2.9 | 13 | 150 | 23 |
| DEC. 1 | 10.7 | | 1.3 | | | |
| DEC. 15 | 9.0 | | 2.9 | | | |
| JAN. 17 | 13.8 | | 1.7 | | | |
| FEB. 1 | 13.2 | | 1.8 | | | |
| FEB. 15 | 12.1 | | 1.3 | | | |
| MAR. 15 | 8.5 | | 0.7 | | | |
| MAR. 16 | | | | 5 | 0 | 31 |
| APR. 5 | 10.2 | | 1.1 | | | |
| APR. 17 | 9.2 | | 1.0 | | | |
| MAY 1 | 9.6 | | 4.3 | | | |
| MAY 16 | | | 1.0 | | | |
| JUNE 7 | 6.6 | | 0.7 | | | |
| JUNE 21 | 7.1 | | 1.0 | | | |
| JULY 5 | 8.1 | 95.0 | 0.9 | | | |
| JULY 17 | 10.0 | 123.0 | 6.0 | | | |
| AUG. 1 | 8.2 | 101.0 | 1.7 | | | |
| AUG. 15 | 8.2 | 98.0 | 4.7 | 0 | 150 | 54 |
| SEP. 6 | 8.5 | 96.0 | 2.4 | | | |
| SEP. 20 | 6.2 | 79.0 | 0.5 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 15 | | 2K | 50K | | 210 | 100 | | 50K | 115 |
| SEP. 20 | | | | | | | | | |

K Less than.

## 07072000 ELEVEN POINT RIVER NEAR RAVENDEN SPRINGS, ARK.

LOCATION.--Lat 36°20'48", long 91°06'48", in SE¼SE¼ sec.30, T.20 N., R.1 W., Randolph County, at gaging station on left bank at downstream side of bridge on State Highway 90, 0.9 mile downstream from Hincha Creek, 1.9 miles upstream from Eassis Creek, 6.6 miles northeast of Ravenden Springs, and at mile 21.2.

DRAINAGE AREA.--1,123 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1953 to September 1959, December 1971 to September 1972.
Water temperatures: October 1956 to September 1958.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, DECEMBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| DEC. 1 | | | | | | 217 | | 3 | | |
| JAN. 17 | | | | | | 182 | | 2 | | |
| FEB. 1 | | | | | | 199 | | 2 | | |
| FEB. 15 | | 100K | 100.0 | 43.2 | 30.1 | 208 | 3 | 3 | 0.500 | 0.030K |
| MAR. 1 | | | | | | 206 | | 2 | | |
| MAR. 15 | | | | | | 200 | | 2 | | |
| APR. 5 | | | | | | 234 | | 2 | | |
| APR. 17 | | | | | | 184 | | 2 | | |
| MAY 2 | | | | | | 117 | | 1 | | |
| MAY 16 | | | | 35.0 | 15.6 | 143 | 6 | 3 | 0.400 | 0.025 |
| JUNE 7 | | | | | | 172 | | 2 | | |
| JUNE 21 | | | | | | 183 | | 3 | | |
| JULY 5 | | | | | | 157 | | 5 | | |
| JULY 17 | | | | | | 181 | | 3 | | |
| AUG. 1 | | | | | | 165 | | 4 | | |
| AUG. 15 | | 100K | | 43.0 | | 193 | 0.1K | 4 | 0.800 | 0.040 |
| SEP. 20 | | | | | | 200 | | 2 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| DEC. 1 | | | | | | 333 | 8.30 | 7.0 | | 25.0K |
| JAN. 17 | | | | | | 312 | 5.20 | 0.0 | | 25.0K |
| FEB. 1 | | | | | | 277 | 8.20 | 4.0 | | 25.0K |
| FEB. 15 | 200 | 7 | 207 | 232 | 108.0 | 303 | 8.30 | 8.0 | 0 | 25.0K |
| MAR. 1 | | | | | | 289 | 8.30 | 14.0 | | 25.0K |
| MAR. 15 | | | | | | 327 | 8.40 | 14.0 | | 25.0K |
| APR. 5 | | | | | | 363 | 8.00 | 14.0 | | 25.0K |
| APR. 17 | | | | | | 370 | 8.10 | 12.0 | | 25.0K |
| MAY 2 | | | | | | 220 | 7.80 | 16.0 | | 25.0K |
| MAY 16 | 173 | 36 | 209 | 152 | 88.0 | 241 | 8.00 | 15.0 | 10 | 25.0K |
| JUNE 7 | | | | | | 313 | 8.10 | 22.0 | | 25.0K |
| JUNE 21 | | | | | | 278 | 8.00 | 21.0 | | 25.0K |
| JULY 5 | | | | | | 299 | 7.90 | 19.0 | | 25.0K |
| JULY 17 | | | | | | 323 | 6.80 | 24.0 | | 25.0K |
| AUG. 1 | | | | | | 300 | 8.00 | 21.0 | | 25.0K |
| AUG. 15 | 17 | 200 | 217 | 210 | 108.0 | 273 | 8.00 | 25.0 | 5 | 14.0 |
| SEP. 20 | | | | | | 361 | 8.10 | 25.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| DEC. 1 | 12.0 | | 1.4 | | | |
| JAN. 17 | 13.2 | | 2.1 | | | |
| FEB. 1 | 12.1 | | 1.3 | | | |
| FEB. 15 | 11.1 | | 1.1 | | | |
| FEB. 16 | | | | 4K | 8 | 7 |
| MAR. 1 | 9.6 | | 0.4 | | | |
| MAR. 15 | 9.5 | | 1.2 | | | |
| APR. 5 | 10.0 | | 0.4 | | | |
| APR. 17 | 8.7 | | 1.2 | | | |
| MAY 2 | 9.3 | | 1.6 | | | |
| MAY 16 | 9.1 | | 1.2 | 40 | 230 | 88 |
| JUNE 7 | 8.6 | | 1.5 | | | |
| JUNE 21 | 8.1 | | 1.1 | | | |
| JULY 5 | 8.8 | 94.0 | 1.0 | | | |
| JULY 17 | 9.1 | 107.0 | 3.0 | | | |
| AUG. 1 | 8.4 | | 0.3 | | | |
| AUG. 15 | 8.2 | | 1.1 | 80 | 220 | 74 |
| SEP. 20 | 8.0 | | 0.9 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 15 | | 2K | 50K | | 10K | | | | |

K Less than.

## 07072500 BLACK RIVER AT BLACK ROCK, ARK.

LOCATION.--Lat 36°06'15", long 91°05'50", in NW¼ sec.21, T.17 N., R.1 W., Lawrence County, at gaging station on right bank 900 ft downstream from St. Louis-San Francisco Railroad bridge at Black Rock, 3.7 miles downstream from Spring River, and at mile 68.3.

DRAINAGE AREA.--7,323 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1945 to September 1946, October 1952 to September 1953, October 1967 to September 1972.
Water temperature: October 1945 to September 1946, October 1952 to September 1953.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | MEAN DIS- CHARGE (CFS) | DIS- SOLVED SILICA (SIO2) (MG/L) | DIS- SOLVED IRON (FE) (UG/L) | DIS- SOLVED MAN- GANESE (MN) (UG/L) | DIS- SOLVED CAL- CIUM (CA) (MG/L) | DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) | DIS- SOLVED SODIUM (NA) (MG/L) | DIS- SOLVED PO- TAS- SIUM (K) (MG/L) | BICAR- BONATE (HCO3) (MG/L) | CAR- BONATE (CO3) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 27... | 2190 | 6.8 | 20 | 20 | 39 | 27 | 2.7 | .9 | 234 | 0 |
| DEC. 01... | 2390 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 29... | 5640 | -- | 320 | 90 | -- | -- | -- | -- | -- | -- |
| FEB. 09... | 4710 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR. 08... | 5690 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR. 12... | 3510 | 7.3 | 10 | 0 | 41 | 20 | 3.0 | .9 | 220 | 0 |
| MAY 17... | 11000 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUNE 19... | 3840 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JULY 31... | 3890 | -- | 0 | 10 | 34 | 18 | 2.9 | 1.4 | 188 | 0 |
| SEP. 05... | 2760 | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | ALKA- LINITY AS CACO3 (MG/L) | DIS- SOLVED SULFATE (SO4) (MG/L) | DIS- SOLVED CHLO- RIDE (CL) (MG/L) | DIS- SOLVED FLUO- RIDE (F) (MG/L) | DIS- SOLVED NITRATE (N) (MG/L) | DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) | ORGANIC NITRO- GEN (N) (MG/L) | TOTAL PHOS- PHORUS (P) (MG/L) | DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) | DIS- SOLVED SOLIDS (TONS PER AC-FT) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 27... | 192 | 3.4 | 14 | -- | .04 | .00 | .08 | .00 | 219 | .30 |
| DEC. 01... | -- | 4.2 | -- | -- | 1.4 | .00 | .18 | .03 | -- | -- |
| 29... | -- | -- | -- | -- | .59 | .00 | .00 | .07 | -- | -- |
| FEB. 09... | -- | -- | -- | -- | .40 | .00 | .12 | -- | -- | -- |
| MAR. 08... | -- | 7.4 | -- | -- | .07 | .00 | .11 | .05 | -- | -- |
| APR. 12... | 180 | 5.7 | 6.0 | .0 | -- | .03 | .21 | .00 | 191 | .26 |
| MAY 17... | -- | 5.3 | -- | -- | .29 | .07 | .21 | .04 | -- | -- |
| JUNE 19... | -- | 3.8 | -- | -- | .41 | .07 | .21 | .04 | -- | -- |
| JULY 31... | 154 | 5.9 | -- | -- | .32 | .00 | .10 | .08 | -- | -- |
| SEP. 05... | -- | 4.5 | -- | -- | .11 | .00 | .12 | .01 | -- | -- |

| DATE | DIS- SOLVED SOLIDS (TONS PER DAY) | HARD- NESS (CA,MG) (MG/L) | NON- CAR- BONATE HARD- NESS (MG/L) | PERCENT SODIUM | SODIUM AD- SORP- TION RATIO | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) | PH (UNITS) | COLOR (PLAT- INUM- COBALT UNITS) | TUR- BID- ITY (MG/L) | CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 27... | 1380 | 210 | 16 | 3 | .1 | 379 | 8.0 | 2 | 25 | 0 |
| DEC. 01... | -- | -- | -- | -- | -- | 342 | 8.3 | 5 | 20 | 8 |
| 29... | -- | -- | -- | -- | -- | 262 | 7.9 | 5 | 25 | 5 |
| FEB. 09... | -- | -- | -- | -- | -- | 295 | 7.9 | 15 | 20 | 1 |
| MAR. 08... | -- | -- | -- | -- | -- | 268 | 7.9 | 20 | 20 | -- |
| APR. 12... | 1810 | 180 | 4 | 3 | .1 | 348 | 8.2 | 5 | -- | 6 |
| MAY 17... | -- | -- | -- | -- | -- | 239 | 7.8 | 15 | 20 | 8 |
| JUNE 19... | -- | -- | -- | -- | -- | 324 | 7.9 | 10 | 30 | 0 |
| JULY 31... | -- | 160 | 5 | 4 | .1 | 291 | 8.0 | 15 | 25 | 8 |
| SEP. 05... | -- | -- | -- | -- | -- | 332 | 7.9 | 5 | 20 | 6 |

## 07072500 BLACK RIVER AT BLACK ROCK, ARK.--continued

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DIS-SOLVED ARSENIC (AS) (UG/L) | DIS-SOLVED CAD-MIUM (CD) (UG/L) | HEXA-VALENT CHRO-MIUM (CR6) (UG/L) | DIS-SOLVED COBALT (CO) (UG/L) | DIS-SOLVED COPPER (CU) (UG/L) | DIS-SOLVED LEAD (PB) (UG/L) | DIS-SOLVED LITHIUM (LI) (UG/L) | DIS-SOLVED MERCURY (HG) (UG/L) | DIS-SOLVED NICKEL (NI) (UG/L) | DIS-SOLVED SILVER (AG) (UG/L) | DIS-SOLVED ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | |
| 27... | <10 | 0 | <10 | 0 | 1 | 0 | 0 | 2.2 | 2 | 1 | 30 |
| DEC. | | | | | | | | | | | |
| 29... | <10 | 0 | <10 | 0 | 3 | 3 | -- | .6 | 3 | 1 | 10 |
| APR. | | | | | | | | | | | |
| 12... | <10 | 0 | <10 | 0 | 3 | 0 | -- | <.5 | 0 | -- | 10 |
| JULY | | | | | | | | | | | |
| 31... | <10 | 0 | <10 | 0 | 3 | 2 | -- | <.5 | 0 | -- | 0 |

### FIELD ANALYSES

| DATE | MEAN DIS-CHARGE (CFS) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | DIS-SOLVED OXYGEN (MG/L) | PER-CENT SATUR-ATION |
|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | |
| 27... | 2190 | 240 | 0 | 197 | 364 | 8.1 | 18.0 | 9.9 | 103 |
| DEC. | | | | | | | | | |
| 01... | 2390 | -- | -- | -- | 359 | 8.8 | 6.5 | 12.0 | 98 |
| 29... | 5640 | -- | -- | -- | 255 | 7.8 | 10.5 | 9.4 | 84 |
| FEB. | | | | | | | | | |
| 09... | 4710 | -- | -- | -- | 321 | -- | 3.5 | 11.8 | 88 |
| MAR. | | | | | | | | | |
| 08... | 5690 | -- | -- | -- | 276 | 8.2 | 8.0 | 9.4 | 80 |
| APR. | | | | | | | | | |
| 12... | 3510 | 206 | 0 | 169 | 356 | 7.4 | 16.0 | 8.9 | 90 |
| MAY | | | | | | | | | |
| 17... | 11000 | 140 | 0 | 115 | 244 | 7.7 | 19.5 | 7.7 | 83 |
| JUNE | | | | | | | | | |
| 19... | 3840 | 202 | 0 | 166 | 331 | 8.1 | 25.0 | 6.8 | 82 |
| JULY | | | | | | | | | |
| 31... | 3890 | 182 | 0 | 149 | 310 | 8.0 | 25.0 | 7.2 | 87 |
| SEP. | | | | | | | | | |
| 05... | 2760 | 168 | 0 | 138 | 287 | 7.8 | 24.5 | 8.4 | 100 |

< LESS THAN.

## 07075900 GREERS FERRY LAKE NEAR HEBER SPRINGS, ARK.

LOCATION.--Lat 35°31'15", long 91°59'42", in SE¼ sec.6, T.10 N., R.9 W., Cleburne County, on State Highway 25 at Greers Ferry Dam on Little Red River, 2.5 miles northeast of Heber Springs, 5.5 miles upstream from Canoe Creek, and at mile 79.0.

DRAINAGE AREA.--1,146 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1972.

REMARKS.--Records furnished (for log boom location about 1,000 ft upstream from dam) by Corps of Engineers, Little Rock, Ark.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| | FEBRUARY 11 | | | MARCH 15 | | |
|---|---|---|---|---|---|---|
| DEPTH (FEET) | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) |
| 0 | -- | --- | -- | 10.9 | 11.8 | 58 |
| 1 | 9.9 | 7.8 | 55 | -- | -- | -- |
| 10 | 9.9 | 7.4 | 56 | 10.7 | 11.2 | 57 |
| 20 | 9.7 | 7.4 | 56 | 10.3 | 11.0 | 56 |
| 30 | 9.5 | 7.4 | 57 | 10.8 | 10.0 | 57 |
| 40 | 9.6 | 7.5 | 56 | 10.4 | 9.2 | 58 |
| 50 | 9.5 | 7.4 | 57 | 10.2 | 8.8 | 59 |
| 60 | 9.5 | 7.5 | 59 | 9.8 | 8.5 | 60 |
| 70 | 9.5 | 7.5 | 59 | 9.8 | 7.9 | 61 |
| 80 | 9.5 | 7.5 | 59 | 9.6 | 7.5 | 62 |
| 90 | 9.5 | 7.5 | 59 | 9.6 | 7.5 | 62 |
| 100 | 9.5 | 7.5 | 59 | 9.6 | 7.5 | 62 |
| 110 | 9.5 | 7.5 | 59 | 9.6 | 7.5 | 63 |
| 120 | 9.5 | 7.5 | 60 | 9.8 | 7.5 | 63 |
| 130 | 9.5 | 7.5 | 60 | 9.8 | 7.5 | 64 |
| 140 | 9.1 | 7.5 | 60 | 9.9 | 7.5 | 64 |
| 150 | 9.5 | 7.5 | 62 | 10.2 | 7.0 | 65 |

| | APRIL 7 | | | MAY 15 | | |
|---|---|---|---|---|---|---|
| DEPTH (FEET) | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) | DISSOLVED OXYGEN (MG/L) | TEMP. (°C) | SPECIFIC CONDUCTANCE (MICROMHOS) |
| 0 | -- | -- | -- | 8.9 | 21.0 | 52 |
| 10 | 7.0 | 14.5 | 50 | 8.9 | 21.0 | 50 |
| 20 | 7.1 | 14.3 | 50 | 8.3 | 20.5 | 51 |
| 30 | 7.0 | 13.5 | 51 | 8.9 | 18.0 | 53 |
| 40 | 6.9 | 13.3 | 51 | 9.4 | 16.0 | 55 |
| 50 | 7.2 | 12.5 | 52 | 9.5 | 14.5 | 58 |
| 60 | 7.6 | 10.5 | 54 | 11.2 | 12.0 | 60 |
| 70 | 7.1 | 10.5 | 53 | 11.1 | 11.0 | 60 |
| 80 | 7.1 | 10.0 | 55 | 11.4 | 9.5 | 64 |
| 90 | 7.1 | 9.9 | 55 | 11.7 | 9.0 | 62 |
| 100 | 7.1 | 9.6 | 56 | 11.7 | 8.8 | 55 |
| 110 | 7.1 | 9.5 | 58 | 11.7 | 8.8 | 55 |
| 120 | 7.1 | 9.1 | 59 | 11.7 | 8.8 | 55 |
| 130 | 7.6 | 9.2 | 58 | 12.0 | 8.5 | 55 |
| 140 | 7.4 | 9.6 | 58 | 12.0 | 8.5 | 58 |
| 150 | 7.6 | 9.5 | 58 | 12.0 | 8.5 | 58 |
| 160 | 7.6 | 9.5 | 58 | -- | -- | -- |

## 07076200 LITTLE RED RIVER NEAR WILBURN, ARK.

LOCATION.--Lat 35°29'33", long 91°58'21", in SW¼SW¼ sec.16, T.10 N., R.9 W., Cleburne County, temperature recorder just upstream from bridge on State Highway 110, 4 miles southwest of Wilburn.

DRAINAGE AREA.--1,196 sq mi.

PERIOD OF RECORD.--Water temperatures: April 1968 to September 1972.

EXTREMES.--Current year:
Water temperatures: Maximum, 19.0°C July 3; minimum, 3.5°C Jan. 17, 31.

Period of record:
Water temperatures: Maximum, 19.5°C June 7, 1971; minimum, 3.0°C Feb. 14, 1971.

REMARKS.--Flow regulated by upstream reservoir. Records furnished by Arkansas Game and Fish Commission, Fisheries Division, Lonoke, Ark.

### TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
### (CONTINUOUS RECORDING THERMOMETER)

| DAY | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1 | 10.0 | 8.0 | 13.5 | 11.5 | 7.0 | 6.5 | 8.0 | 7.0 | 6.0 | 5.5 | 8.5 | 7.0 |
| 2 | 11.0 | 9.0 | 11.5 | 9.0 | 6.5 | 5.5 | 8.0 | 6.5 | 6.5 | 6.0 | 8.5 | 7.0 |
| 3 | 12.0 | 9.5 | 9.5 | 8.0 | 5.5 | 5.0 | 8.0 | 6.5 | 6.0 | 5.0 | 8.5 | 6.0 |
| 4 | 11.5 | 10.0 | 8.5 | 7.0 | 5.0 | 5.0 | 8.0 | 6.5 | 6.0 | 5.0 | 6.5 | 5.5 |
| 5 | 10.5 | 9.0 | 9.0 | 7.0 | 5.5 | 5.0 | 8.5 | 6.0 | 6.0 | 4.5 | 7.0 | 6.0 |
| 6 | 10.5 | 9.0 | 8.5 | 8.5 | 6.0 | 5.5 | 8.0 | 6.5 | 6.5 | 5.5 | 8.0 | 6.0 |
| 7 | 11.5 | 10.5 | 8.5 | 7.0 | 6.5 | 6.0 | 8.5 | 6.0 | 6.0 | 5.0 | 7.0 | 7.0 |
| 8 | 11.0 | 10.0 | 7.0 | 6.0 | 7.0 | 6.5 | 7.0 | 6.5 | 6.5 | 4.5 | 7.0 | 6.0 |
| 9 | 11.0 | 10.0 | 8.5 | 6.5 | 8.5 | 7.0 | 8.5 | 7.0 | 6.5 | 5.0 | 7.0 | 5.5 |
| 10 | 11.0 | 10.5 | 8.5 | 7.0 | 11.0 | 8.5 | 8.5 | 7.0 | 6.0 | 5.0 | 9.0 | 6.5 |
| 11 | 11.5 | 10.0 | 8.5 | 7.0 | 9.5 | 8.0 | 8.5 | 7.0 | 6.0 | 4.5 | 11.5 | 9.0 |
| 12 | 11.0 | 10.0 | 9.5 | 8.0 | 8.5 | 8.0 | 8.5 | 6.5 | 6.5 | 6.0 | 13.0 | 11.5 |
| 13 | 11.0 | 10.0 | 10.5 | 9.0 | 8.5 | 7.0 | 8.0 | 6.5 | 7.0 | 6.0 | 13.5 | 9.0 |
| 14 | 11.0 | 10.0 | 11.5 | 10.0 | 9.0 | 6.5 | 8.0 | 6.0 | 7.0 | 6.0 | 10.0 | 8.5 |
| 15 | 11.5 | 10.5 | 12.0 | 11.0 | 9.5 | 8.0 | 7.0 | 5.5 | 7.0 | 6.5 | 9.5 | 7.0 |
| 16 | 10.5 | 10.0 | 12.0 | 11.0 | 8.5 | 7.0 | 5.5 | 4.0 | 8.0 | 6.0 | 9.0 | 8.0 |
| 17 | 11.5 | 10.5 | 11.5 | 10.5 | 8.5 | 7.0 | 4.5 | 3.5 | 6.5 | 5.5 | 8.5 | 6.5 |
| 18 | 11.5 | 11.0 | 11.0 | 11.0 | 8.0 | 6.5 | 6.5 | 4.5 | 6.0 | 5.0 | 9.5 | 7.0 |
| 19 | 11.0 | 9.5 | 11.0 | 9.5 | -- | -- | 7.0 | 7.0 | 6.0 | 5.0 | 11.0 | 9.0 |
| 20 | 10.5 | 9.5 | 9.5 | 8.5 | -- | -- | 8.5 | 7.0 | 6.0 | 5.5 | 11.5 | 7.0 |
| 21 | 11.0 | 10.0 | 9.5 | 8.5 | -- | -- | 8.5 | 8.0 | 6.5 | 5.5 | 8.5 | 7.0 |
| 22 | 10.5 | 10.0 | 9.0 | 6.5 | -- | -- | 8.5 | 8.0 | 7.0 | 6.0 | 8.5 | 7.0 |
| 23 | 10.5 | 10.0 | 6.5 | 6.0 | 8.0 | 6.5 | 9.5 | 8.5 | 6.5 | 6.0 | 9.0 | 7.0 |
| 24 | 11.5 | 10.5 | 6.5 | 6.5 | 8.0 | 6.5 | 10.5 | 9.0 | 7.0 | 6.5 | 8.0 | 6.5 |
| 25 | 13.0 | 10.5 | 6.5 | 5.5 | 9.0 | 8.0 | 9.0 | 6.0 | 6.5 | 6.0 | 8.0 | 6.0 |
| 26 | 10.5 | 9.5 | 6.5 | 6.5 | 10.0 | 9.0 | 6.5 | 5.0 | 8.0 | 5.5 | 8.0 | 7.0 |
| 27 | 10.5 | 9.0 | 6.5 | 6.0 | 12.0 | 10.0 | 6.5 | 6.0 | 8.5 | 6.5 | 10.0 | 8.0 |
| 28 | 10.0 | 9.0 | 6.5 | 5.5 | 10.0 | 8.0 | 6.0 | 5.5 | 8.5 | 7.0 | 10.0 | 8.0 |
| 29 | 10.0 | 9.0 | 6.5 | 6.0 | 8.0 | 7.0 | 5.5 | 5.0 | 8.0 | 7.0 | 8.0 | 7.0 |
| 30 | 10.0 | 9.0 | 7.0 | 6.0 | 9.0 | 8.0 | 5.0 | 4.5 | -- | -- | 8.0 | 6.5 |
| 31 | 12.0 | 10.0 | -- | -- | 8.5 | 7.0 | 6.0 | 3.5 | -- | -- | 8.5 | 6.5 |
| AVG | 11.0 | 10.0 | 9.0 | 8.0 | 8.0 | 7.0 | 7.5 | 6.0 | 6.5 | 5.5 | 9.0 | 7.0 |

| DAY | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1 | 9.0 | 7.0 | 15.5 | 11.0 | 11.0 | 8.5 | 11.5 | 9.0 | 11.0 | 9.0 | 12.0 | 10.5 |
| 2 | 11.0 | 8.5 | 13.0 | 9.0 | 11.0 | 8.0 | 12.0 | 10.0 | 12.0 | 9.0 | 12.0 | 10.5 |
| 3 | 11.0 | 10.5 | 11.0 | 8.5 | 11.5 | 8.5 | 19.0 | 11.5 | 12.0 | 9.0 | 13.0 | 10.5 |
| 4 | 10.5 | 9.0 | 12.0 | 8.5 | 12.0 | 8.5 | 15.5 | 11.0 | 11.5 | 9.0 | 11.5 | 11.0 |
| 5 | 10.0 | 8.0 | 10.5 | 8.0 | 11.0 | 8.5 | 14.5 | 10.5 | 11.5 | 9.0 | 11.5 | 10.5 |
| 6 | 9.5 | 7.0 | 12.0 | 8.5 | 10.0 | 8.0 | 15.0 | 11.5 | 14.5 | 11.5 | 13.5 | 10.5 |
| 7 | 9.5 | 7.0 | 11.5 | 10.0 | 10.0 | 8.0 | 14.5 | 12.0 | 15.5 | 9.5 | 13.0 | 10.0 |
| 8 | 9.0 | 7.0 | 14.5 | 9.0 | 10.0 | 8.0 | 12.0 | 9.0 | 13.0 | 9.0 | 13.0 | 9.5 |
| 9 | 11.0 | 8.5 | 9.0 | 8.5 | 10.0 | 8.0 | 14.5 | 9.5 | 12.0 | 9.5 | 13.0 | 9.5 |
| 10 | 11.0 | 7.0 | 10.0 | 8.5 | 9.5 | 8.0 | 11.5 | 9.0 | 12.0 | 9.0 | 13.0 | 10.5 |
| 11 | 9.5 | 7.0 | 10.5 | 8.5 | 13.0 | 9.5 | 11.5 | 8.5 | 13.5 | 9.0 | 13.5 | 9.5 |
| 12 | 10.5 | 7.0 | 8.5 | 7.0 | 14.5 | 9.0 | 11.5 | 8.5 | 13.0 | 10.0 | 13.0 | 9.5 |
| 13 | 11.5 | 8.0 | -- | -- | 11.0 | 9.0 | 12.0 | 8.5 | 15.0 | 11.5 | 12.0 | 9.5 |
| 14 | 10.0 | 8.5 | -- | -- | 10.5 | 9.0 | 12.0 | 9.0 | 15.5 | 9.5 | 12.0 | 9.5 |
| 15 | 11.0 | 8.5 | 16.5 | 8.5 | 12.0 | 9.0 | 12.0 | 9.0 | 11.5 | 9.0 | 14.5 | 10.0 |
| 16 | 13.5 | 11.0 | 10.0 | 8.0 | 12.0 | 8.5 | 14.0 | 10.5 | 12.0 | 9.0 | 13.0 | 9.5 |
| 17 | 15.5 | 8.0 | 9.5 | 8.0 | 15.0 | 12.0 | 14.5 | 8.5 | 12.0 | 9.0 | 13.0 | 12.0 |
| 18 | 8.5 | 7.0 | 9.5 | 8.0 | 16.5 | 9.0 | 10.0 | 8.5 | 11.5 | 9.0 | 13.0 | 9.5 |
| 19 | 9.0 | 7.0 | 10.0 | 8.0 | 11.5 | 8.5 | 11.5 | 8.5 | 13.0 | 9.0 | 12.0 | 9.5 |
| 20 | 9.0 | 7.0 | 11.0 | 8.0 | 11.5 | 8.5 | 11.5 | 8.5 | 13.0 | 9.5 | 11.5 | 9.5 |
| 21 | 10.5 | 9.0 | 15.0 | 11.0 | 10.0 | 9.0 | 11.5 | 9.0 | 14.0 | 9.5 | 12.0 | 10.0 |
| 22 | 14.0 | 10.5 | 18.0 | 8.5 | 13.0 | 8.5 | 12.0 | 9.0 | 11.0 | 9.5 | 11.5 | 9.5 |
| 23 | 16.0 | 13.5 | 11.0 | 8.5 | 12.0 | 8.5 | 13.0 | 9.5 | 13.0 | 9.5 | 13.5 | 11.0 |
| 24 | 16.5 | 8.5 | 10.0 | 8.0 | 12.0 | 8.5 | 13.5 | 9.0 | 13.5 | 10.0 | 13.5 | 13.0 |
| 25 | 10.5 | 8.0 | 11.0 | 8.0 | -- | -- | 11.0 | 8.5 | 12.0 | 10.0 | 13.5 | 11.5 |
| 26 | 12.0 | 10.0 | 10.5 | 8.0 | -- | -- | 10.5 | 8.5 | 13.5 | 10.5 | 13.0 | 10.0 |
| 27 | 12.0 | 10.5 | 10.0 | 8.0 | -- | -- | 11.0 | 9.0 | 15.5 | 13.5 | -- | -- |
| 28 | 11.5 | 11.0 | 11.0 | 8.0 | -- | -- | 11.5 | 9.0 | 16.5 | 15.0 | -- | -- |
| 29 | 14.5 | 11.5 | 12.0 | 10.5 | -- | -- | 11.5 | 9.5 | 16.5 | 14.0 | -- | -- |
| 30 | 15.5 | 14.0 | 12.0 | 9.0 | -- | -- | 14.0 | 11.0 | 15.0 | 12.0 | -- | -- |
| 31 | -- | -- | 10.5 | 8.5 | -- | -- | 15.0 | 9.5 | 13.5 | 11.0 | -- | -- |
| AVG | 11.5 | 9.0 | 11.5 | 8.5 | 11.5 | 8.5 | 13.0 | 9.5 | 13.0 | 10.0 | 12.5 | 10.0 |

## 07076500 LITTLE RED RIVER AT PANGBURN, ARK.

LOCATION.--Lat 35°27', long 91°50', in NE¼ sec.3, T.9 N., R.8 W., White County, temperature recorder on right bank, 0.6 mile downstream from bridge on secondary road, 1 mile north of Pangburn, 8.6 miles upstream from Fourteen Mile Creek, and 22.1 miles downstream from Greers Ferry Dam.

DRAINAGE AREA.--1,227 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1966 to September 1972.

EXTREMES.--Current year:
Water temperatures: Maximum, 18.0°C Aug. 30, 31; minimum, 4.0°C Jan. 16-18.

Period of record:
Water temperatures: Maximum, 22.0°C June 10, 1971; minimum, 2.0°C Dec. 30, 1966.

REMARKS.--Flow regulated by upstream reservoir. Records furnished by Arkansas Game and Fish Commission, Fisheries Division, Lonoke, Ark.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS RECORDING THERMOMETER)

| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1 | -- | -- | 13.5 | 13.0 | 7.0 | 6.5 | 8.0 | 7.0 | 5.5 | 4.5 | 8.5 | 8.0 |
| 2 | -- | -- | 13.0 | 10.0 | 7.0 | 6.0 | 8.0 | 7.0 | 6.0 | 5.5 | 8.0 | 6.5 |
| 3 | -- | -- | 10.0 | 9.5 | 6.0 | 5.5 | 7.0 | 7.0 | 6.0 | 5.5 | 7.0 | 6.5 |
| 4 | 13.0 | 13.0 | 10.0 | 9.0 | 5.5 | 5.5 | 7.0 | 7.0 | 5.5 | 5.5 | 8.0 | 7.0 |
| 5 | 13.0 | 12.0 | 9.5 | 9.0 | 6.0 | 5.5 | 7.0 | 6.5 | 6.0 | 5.5 | 7.0 | 6.0 |
| 6 | 13.0 | 11.5 | 9.0 | 8.0 | 6.5 | 6.0 | 7.0 | 6.5 | 6.0 | 5.5 | 8.0 | 6.5 |
| 7 | 13.0 | 11.5 | 8.0 | 7.0 | 6.5 | 6.5 | 7.0 | 7.0 | 6.0 | 5.0 | 8.0 | 7.0 |
| 8 | 12.0 | 11.5 | 8.0 | 7.0 | 6.5 | 6.5 | 7.0 | 7.0 | 5.5 | 5.5 | 8.0 | 7.0 |
| 9 | 13.0 | 12.0 | 8.0 | 7.0 | 7.0 | 6.5 | 8.0 | 7.0 | 6.0 | 5.5 | 8.5 | 7.0 |
| 10 | 13.0 | 12.0 | 8.5 | 7.0 | 9.5 | 7.0 | 8.0 | 7.0 | 6.0 | 5.5 | 8.5 | 7.0 |
| 11 | 13.0 | 11.5 | 9.0 | 8.0 | 9.5 | 9.0 | 8.0 | 7.0 | 6.0 | 5.0 | 10.0 | 8.0 |
| 12 | 13.5 | 12.0 | 10.0 | 8.5 | -- | -- | 8.0 | 7.0 | 6.0 | 5.5 | 11.5 | 10.0 |
| 13 | 13.5 | 13.0 | 9.5 | 8.5 | -- | -- | 8.0 | 7.0 | 6.0 | 5.5 | 13.0 | 11.0 |
| 14 | 13.5 | 13.0 | 11.0 | 9.5 | -- | -- | 7.0 | 6.5 | 6.5 | 5.5 | 12.0 | 11.5 |
| 15 | 13.5 | 13.0 | 11.0 | 10.5 | -- | -- | 6.5 | 5.5 | 7.0 | 6.5 | 11.5 | 9.0 |
| 16 | -- | -- | 11.0 | 10.5 | -- | -- | 5.5 | 4.0 | 7.0 | 6.5 | 9.5 | 8.5 |
| 17 | -- | -- | 11.0 | 10.5 | -- | -- | 4.5 | 4.0 | 6.5 | 6.0 | 9.0 | 9.0 |
| 18 | 14.5 | 14.0 | 11.0 | 11.0 | -- | -- | 5.0 | 4.0 | 6.0 | 6.0 | 10.0 | 8.5 |
| 19 | 14.0 | 13.5 | 11.0 | 10.5 | -- | -- | 7.0 | 5.0 | 6.0 | 5.0 | -- | -- |
| 20 | 13.5 | 13.0 | 10.5 | 9.5 | 7.0 | 7.0 | 8.0 | 7.0 | 5.5 | 5.0 | -- | -- |
| 21 | 13.5 | 13.0 | 10.0 | 9.5 | 8.0 | 7.0 | 8.0 | 7.0 | 6.5 | 5.5 | 10.0 | 9.0 |
| 22 | 13.0 | 12.0 | 9.5 | 8.5 | 8.0 | 7.0 | 8.0 | 7.0 | 6.5 | 6.0 | 9.5 | 8.5 |
| 23 | 13.5 | 12.0 | 8.5 | 6.5 | 7.0 | 7.0 | 9.0 | 8.0 | 7.0 | 6.0 | 9.5 | 8.5 |
| 24 | 14.0 | 13.5 | 7.0 | 6.5 | 7.0 | 7.0 | 9.5 | 8.5 | 7.0 | 6.5 | 9.5 | 7.0 |
| 25 | 14.5 | 13.0 | 6.5 | 6.0 | 8.5 | 7.0 | 9.0 | 8.0 | 7.0 | 7.0 | 8.5 | 7.0 |
| 26 | 14.0 | 13.0 | 6.5 | 6.5 | 9.0 | 8.0 | 8.0 | 6.5 | 7.0 | 6.0 | 8.0 | 7.0 |
| 27 | 13.5 | 12.0 | 6.5 | 6.0 | 10.0 | 9.0 | 6.5 | 6.0 | 8.5 | 6.0 | 9.0 | 8.0 |
| 28 | 12.0 | 11.0 | 6.5 | 6.0 | -- | -- | 6.5 | 6.0 | 9.0 | 8.0 | 9.5 | 9.0 |
| 29 | 12.0 | 11.0 | 6.5 | 6.0 | 9.0 | 8.0 | 5.5 | 5.5 | 9.0 | 8.5 | 9.5 | 8.5 |
| 30 | 11.5 | 10.5 | 6.5 | 6.0 | 8.5 | 8.0 | 5.5 | 5.0 | -- | -- | 8.5 | 8.0 |
| 31 | 13.0 | 11.5 | -- | -- | 8.5 | 8.0 | 5.0 | 4.5 | -- | -- | 8.5 | 7.0 |
| AVG | 13.0 | 12.0 | 9.0 | 8.5 | -- | -- | 7.0 | 6.5 | 6.5 | 6.0 | 9.0 | 8.0 |

| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1 | 9.5 | 8.0 | 14.0 | 14.0 | -- | -- | 11.0 | 10.0 | 15.0 | 11.5 | 16.5 | 15.5 |
| 2 | 10.0 | 8.5 | 14.0 | 13.0 | -- | -- | 12.0 | 11.0 | 11.5 | 10.0 | 15.5 | 14.5 |
| 3 | 10.0 | 10.0 | 13.0 | 11.5 | -- | -- | 15.0 | 12.0 | 11.5 | 10.0 | 14.5 | 14.5 |
| 4 | 10.5 | 9.5 | 11.5 | 10.0 | -- | -- | 16.0 | 14.5 | 11.5 | 10.0 | 14.0 | 14.0 |
| 5 | 11.0 | 10.0 | 11.5 | 11.0 | -- | -- | 14.5 | 14.0 | 11.0 | 10.0 | 15.0 | 14.0 |
| 6 | 10.0 | 9.0 | 11.0 | 10.0 | -- | -- | 15.5 | 14.0 | 14.0 | 11.0 | 15.0 | 14.5 |
| 7 | 10.0 | 9.0 | 12.0 | 11.0 | -- | -- | 16.0 | 15.0 | 15.5 | 14.0 | 15.0 | 14.0 |
| 8 | 9.5 | 8.5 | 14.5 | 12.0 | 10.5 | 9.5 | 15.5 | 13.5 | 15.5 | 11.0 | 14.0 | 11.5 |
| 9 | 10.0 | 8.5 | 14.0 | 10.5 | 10.0 | 9.0 | 15.0 | 13.0 | 11.5 | 10.5 | 12.0 | 11.0 |
| 10 | 11.0 | 9.5 | 11.0 | 9.5 | 10.0 | 9.0 | 15.0 | 13.0 | 12.0 | 11.5 | 14.0 | 11.5 |
| 11 | 10.0 | 9.0 | 11.0 | 10.0 | 12.0 | 9.5 | 13.0 | 10.5 | 13.5 | 12.0 | 14.5 | 14.0 |
| 12 | 10.0 | 9.0 | 10.5 | 9.5 | 14.0 | 11.5 | 11.5 | 10.5 | 13.5 | 13.0 | 14.5 | 11.5 |
| 13 | 10.5 | 9.5 | 10.5 | 9.0 | 14.0 | 11.0 | 11.5 | 10.0 | 14.5 | 13.0 | 13.5 | 12.0 |
| 14 | 11.0 | 10.5 | 12.0 | 10.0 | 11.5 | 10.5 | 13.0 | 11.0 | 16.5 | 14.5 | 13.0 | 10.5 |
| 15 | 11.0 | 10.5 | 14.5 | 12.0 | 13.0 | 11.0 | 12.0 | 11.0 | 16.5 | 13.0 | 13.5 | 11.5 |
| 16 | 13.0 | 11.0 | 14.5 | 10.5 | 14.0 | 12.0 | 14.0 | 11.5 | 13.0 | 11.5 | 14.0 | 13.0 |
| 17 | 14.5 | 12.0 | 11.0 | 9.5 | 13.5 | 10.5 | 16.0 | 14.0 | 13.0 | 11.0 | 13.0 | 13.0 |
| 18 | 14.0 | 9.5 | 10.0 | 9.0 | 14.0 | 11.5 | 15.5 | 11.0 | 11.5 | 10.5 | 14.5 | 13.0 |
| 19 | 9.5 | 9.0 | 10.0 | 9.0 | 16.0 | 13.5 | 11.5 | 10.5 | 11.5 | 10.0 | 14.5 | 11.5 |
| 20 | 9.5 | 8.5 | 10.0 | 9.0 | 16.0 | 11.0 | 11.5 | 10.0 | 13.0 | 11.5 | 11.5 | 10.5 |
| 21 | 11.0 | 9.0 | 13.0 | 10.0 | 11.5 | 10.0 | 11.5 | 10.0 | 14.0 | 12.0 | 11.5 | 11.5 |
| 22 | 13.5 | 11.0 | 15.0 | 13.0 | 11.0 | 10.0 | 11.5 | 10.0 | 13.5 | 11.0 | 13.0 | 11.5 |
| 23 | 14.0 | 13.0 | -- | -- | 13.0 | 10.5 | 13.0 | 11.5 | 12.0 | 11.0 | 13.5 | 13.0 |
| 24 | 15.0 | 14.0 | -- | -- | -- | -- | 14.5 | 12.0 | 14.0 | 12.0 | 14.0 | 13.5 |
| 25 | 15.0 | 11.0 | -- | -- | 11.0 | 9.5 | 13.5 | 10.5 | 14.0 | 12.0 | 15.0 | 14.0 |
| 26 | 11.5 | 10.5 | -- | -- | 13.5 | 11.0 | 11.0 | 10.0 | 14.0 | 12.0 | 15.0 | 13.5 |
| 27 | 11.5 | 11.0 | -- | -- | 11.0 | 10.0 | 11.0 | 10.0 | 15.5 | 14.0 | 14.0 | 14.0 |
| 28 | 11.5 | 11.5 | -- | -- | 11.5 | 9.5 | 11.0 | 10.0 | 16.0 | 15.0 | 14.5 | 13.5 |
| 29 | 13.5 | 11.5 | -- | -- | 11.0 | 9.5 | 11.5 | 10.5 | 17.0 | 16.0 | 14.5 | 13.5 |
| 30 | 14.0 | 13.0 | -- | -- | 11.5 | 10.0 | 13.0 | 11.0 | 18.0 | 17.0 | 13.5 | 12.0 |
| 31 | -- | -- | -- | -- | -- | -- | 15.0 | 13.0 | 18.0 | 16.5 | -- | -- |
| AVG | 11.5 | 10.0 | -- | -- | -- | -- | 13.0 | 11.5 | 14.0 | 12.0 | 14.0 | 13.0 |

## 07076620 LITTLE RED RIVER NEAR SEARCY, ARK.

LOCATION.--Lat 35°17', long 91°43', in SE¼ sec.26, T.8 N., R.7 W., White County, temperature recorder on right bank near waterworks tower, 2.5 miles northeast of Searcy, 12.8 miles downstream from Ten Mile Creek, and 23.4 miles upstream from Big Mingo Creek.

DRAINAGE AREA.--1,648 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1966 to September 1972.

EXTREMES.--Current year:
Water temperatures: Maximum, 23.5°C Aug. 29, Sept. 1, 2; minimum, 3.0°C Jan. 17, 18.

Period of record:
Water temperatures: Maximum, 29.0°C June 30, 1969, June 13, 1971; minimum, freezing point Jan. 18, 19, 1967.

REMARKS.--Flow regulated by upstream reservoir. Records furnished by Arkansas Game and Fish Commission, Fisheries Division, Lonoke, Ark.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS RECORDING THERMOMETER)

| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1 | 11.0 | 10.5 | 16.5 | 15.0 | 6.5 | 6.0 | 8.5 | 8.0 | 4.5 | 3.5 | 11.5 | 10.5 |
| 2 | 12.0 | 10.5 | 16.5 | 15.5 | 6.0 | 5.5 | 8.0 | 7.0 | 5.5 | 4.0 | 11.0 | 9.5 |
| 3 | 14.0 | 12.0 | 15.5 | 14.0 | 5.5 | 5.0 | 8.0 | 7.0 | 6.0 | 5.5 | 9.5 | 8.5 |
| 4 | 15.0 | 14.0 | 14.0 | 12.0 | 5.5 | 5.5 | 8.0 | 6.0 | 6.0 | 5.0 | 8.5 | 8.0 |
| 5 | 16.0 | 15.0 | 12.0 | 11.0 | 5.5 | 5.5 | 6.0 | 5.5 | 6.0 | 5.0 | 8.5 | 7.0 |
| 6 | 16.5 | 15.0 | 11.5 | 11.0 | 6.0 | 5.5 | 6.5 | 5.5 | 6.5 | 6.0 | 9.0 | 7.0 |
| 7 | 16.0 | 15.0 | 11.0 | 9.5 | 6.5 | 6.0 | 7.0 | 5.5 | 6.0 | 5.0 | 9.0 | 8.0 |
| 8 | 16.0 | 15.0 | 9.5 | 9.0 | 7.0 | 6.5 | 8.0 | 6.5 | 5.5 | 4.5 | 9.5 | 8.5 |
| 9 | 16.0 | 15.0 | 10.0 | 8.5 | 8.5 | 7.0 | 8.0 | 7.0 | 6.0 | 5.0 | 9.0 | 8.5 |
| 10 | 15.5 | 14.5 | 8.5 | 8.0 | 11.0 | 8.5 | 8.0 | 8.0 | 6.0 | 5.5 | 10.0 | 8.5 |
| 11 | 16.5 | 15.0 | 8.5 | 8.0 | 11.0 | 10.0 | 8.5 | 7.0 | 6.0 | 5.5 | 11.5 | 9.5 |
| 12 | 16.0 | 15.0 | 10.0 | 8.5 | 10.0 | 9.5 | 8.5 | 7.0 | 6.0 | 5.5 | 13.5 | 11.0 |
| 13 | 16.0 | 15.0 | 11.0 | 9.0 | 9.5 | 9.0 | 8.5 | 8.0 | 6.5 | 5.5 | 14.0 | 13.0 |
| 14 | 17.0 | 15.5 | 12.0 | 10.0 | 9.5 | 8.5 | 8.0 | 6.5 | 7.0 | 5.5 | 14.5 | 13.5 |
| 15 | 16.5 | 16.0 | 13.0 | 10.5 | 10.5 | 9.5 | 6.5 | 5.5 | 8.0 | 6.5 | 16.0 | 14.0 |
| 16 | 16.5 | 16.0 | 12.0 | 11.0 | 10.5 | 9.5 | 5.5 | 3.5 | 8.5 | 8.0 | 15.5 | 11.0 |
| 17 | 17.0 | 16.5 | 12.0 | 11.0 | 9.5 | 9.0 | 3.5 | 3.0 | 8.5 | 8.0 | 11.0 | 10.5 |
| 18 | 18.0 | 17.0 | 12.0 | 11.5 | 9.0 | 8.0 | 3.5 | 3.0 | 8.0 | 6.5 | 12.0 | 10.5 |
| 19 | 18.0 | 18.0 | 11.5 | 11.5 | 8.0 | 7.0 | 4.5 | 3.5 | 7.0 | 6.0 | 13.0 | 11.0 |
| 20 | 18.0 | 17.0 | 11.5 | 11.0 | 7.0 | 7.0 | 8.5 | 4.5 | 7.0 | 6.0 | 14.5 | 12.0 |
| 21 | 18.0 | 17.0 | 11.5 | 10.5 | 8.0 | 7.0 | 8.5 | 8.5 | 7.0 | 6.0 | 14.0 | 11.0 |
| 22 | 18.0 | 17.0 | 10.5 | 10.0 | 8.5 | 8.0 | 9.0 | 8.5 | 8.0 | 6.5 | 11.0 | 10.0 |
| 23 | 17.0 | 17.0 | 10.0 | 8.0 | 8.5 | 7.0 | 10.0 | 9.0 | 8.0 | 7.0 | 11.5 | 10.5 |
| 24 | 17.0 | 17.0 | 8.0 | 6.5 | 8.0 | 7.0 | 10.5 | 9.5 | 8.5 | 8.0 | 11.5 | 10.0 |
| 25 | 19.0 | 16.5 | 7.0 | 6.5 | 8.5 | 8.0 | 10.0 | 9.0 | 8.5 | 8.5 | 10.0 | 9.0 |
| 26 | 18.0 | 16.5 | 6.5 | 6.5 | 9.5 | 8.5 | 9.0 | 8.0 | 9.0 | 8.5 | 9.0 | 9.0 |
| 27 | 17.0 | 16.0 | 6.5 | 6.0 | 11.0 | 9.5 | 8.0 | 6.5 | 9.5 | 8.5 | -- | -- |
| 28 | 16.0 | 15.5 | 6.5 | 6.0 | 11.0 | 10.0 | 6.5 | 5.5 | 10.0 | 8.5 | -- | -- |
| 29 | 16.0 | 15.0 | 6.5 | 6.5 | 10.5 | 10.0 | 6.0 | 5.0 | 10.5 | 9.0 | 11.5 | 9.5 |
| 30 | 15.0 | 15.0 | 6.5 | 6.0 | 10.0 | 9.0 | 5.0 | 4.5 | -- | -- | 9.5 | 9.5 |
| 31 | 15.0 | 14.5 | -- | -- | 9.0 | 8.5 | 4.5 | 4.0 | -- | -- | 10.0 | 9.0 |
| AVG | 16.0 | 15.5 | 10.5 | 9.5 | 8.5 | 8.0 | 7.5 | 6.5 | 7.0 | 6.0 | 11.5 | 10.0 |

| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1 | 14.0 | 9.5 | 16.0 | 15.5 | 16.5 | 15.5 | 14.5 | 13.5 | 18.5 | 16.5 | 23.5 | 21.5 |
| 2 | 11.5 | 10.0 | 15.5 | 15.5 | 16.0 | 15.0 | 16.0 | 14.0 | 18.0 | 13.5 | 23.5 | 22.0 |
| 3 | 11.5 | 11.0 | 15.5 | 14.5 | 16.0 | 15.0 | 20.5 | 15.0 | 14.5 | 13.0 | 22.0 | 21.0 |
| 4 | 11.5 | 11.0 | 14.5 | 14.0 | 16.5 | 15.0 | 20.0 | 19.0 | 13.5 | 12.0 | 20.5 | 19.5 |
| 5 | 12.0 | 11.0 | 15.0 | 14.0 | 17.0 | 15.5 | 20.5 | 19.0 | 13.5 | 12.0 | 20.5 | 19.0 |
| 6 | 13.5 | 12.0 | 15.0 | 14.5 | 16.5 | 14.0 | 20.5 | 19.5 | 16.5 | 13.5 | 21.0 | 19.0 |
| 7 | 13.5 | 13.0 | 15.0 | 14.5 | 14.0 | 11.5 | 20.5 | 19.0 | 18.5 | 15.5 | 21.0 | 19.0 |
| 8 | 13.0 | 10.5 | 16.5 | 15.0 | 12.0 | 11.0 | 20.5 | 19.5 | 19.0 | 16.0 | 20.0 | 15.5 |
| 9 | 11.5 | 10.0 | 17.0 | 16.5 | 11.0 | 11.0 | 21.5 | 19.5 | 16.0 | 13.0 | 15.5 | 14.0 |
| 10 | 13.0 | 11.0 | 16.5 | 13.5 | 11.0 | 10.5 | 21.0 | 19.5 | 14.0 | 13.0 | 15.0 | 13.5 |
| 11 | 14.0 | 12.0 | 14.0 | 13.5 | 13.5 | 10.5 | 19.5 | 14.5 | 16.0 | 14.0 | 16.5 | 14.5 |
| 12 | 12.0 | 11.5 | 14.0 | 13.5 | 17.0 | 13.0 | 14.5 | 13.5 | 17.0 | 16.0 | 17.0 | 15.0 |
| 13 | 14.0 | 12.0 | 13.0 | 13.0 | 18.0 | 15.0 | 14.0 | 13.0 | 19.0 | 16.5 | 15.0 | 14.0 |
| 14 | 15.0 | 14.0 | 14.0 | 13.0 | 17.0 | 14.5 | 15.0 | 13.5 | 20.0 | 18.0 | 15.0 | 13.5 |
| 15 | 16.0 | 15.0 | 14.5 | 14.0 | 16.0 | 14.5 | 16.0 | 15.0 | 20.5 | 19.5 | 15.5 | 13.0 |
| 16 | 16.5 | 15.5 | 18.5 | 14.5 | 16.5 | 15.0 | 17.0 | 15.0 | 20.0 | 15.5 | 16.5 | 14.5 |
| 17 | 18.0 | 15.5 | 18.0 | 12.0 | 16.5 | 15.5 | 19.0 | 16.5 | 15.5 | 14.5 | 17.0 | 16.5 |
| 18 | 18.0 | 16.0 | -- | -- | 18.0 | 15.0 | 19.5 | 14.0 | 14.5 | 13.5 | 19.5 | 17.0 |
| 19 | 16.5 | 10.5 | -- | -- | 20.0 | 16.5 | 14.0 | 13.0 | 14.0 | 13.0 | 19.0 | 14.5 |
| 20 | 11.0 | 10.0 | 11.5 | 10.5 | 20.0 | 18.0 | 14.0 | 13.5 | 14.5 | 13.0 | 14.0 | 12.0 |
| 21 | 14.0 | 10.0 | 12.0 | 11.5 | 18.5 | 13.0 | 13.5 | 13.0 | 17.0 | 14.5 | 13.5 | 13.0 |
| 22 | 15.5 | 14.0 | 14.0 | 12.0 | 13.0 | 12.0 | 13.5 | 12.0 | 17.0 | 13.0 | 15.0 | 13.5 |
| 23 | 17.0 | 15.5 | 16.5 | 14.0 | 14.0 | 11.5 | 15.0 | 13.0 | 14.0 | 13.0 | 16.0 | 15.0 |
| 24 | 18.0 | 16.5 | 19.5 | 16.5 | 14.5 | 13.5 | 17.0 | 15.0 | 16.0 | 14.0 | 16.5 | 16.0 |
| 25 | 17.0 | 16.5 | 16.5 | 13.0 | 14.0 | 11.5 | 18.0 | 13.0 | 17.0 | 15.5 | 18.0 | 16.5 |
| 26 | 17.0 | 15.5 | 13.5 | 12.0 | 14.5 | 12.0 | 13.0 | 12.0 | 19.0 | 17.0 | 18.5 | 18.0 |
| 27 | 15.5 | 14.5 | 14.0 | 13.5 | 15.0 | 12.0 | 13.0 | 12.0 | 20.0 | 18.0 | 19.0 | 18.5 |
| 28 | 14.5 | 14.5 | 14.5 | 13.5 | 13.0 | 12.0 | 13.5 | 12.0 | 20.5 | 19.5 | 20.5 | 18.5 |
| 29 | 15.0 | 14.5 | 15.5 | 13.5 | 14.0 | 12.0 | 13.5 | 12.0 | 23.5 | 19.5 | 19.5 | 18.0 |
| 30 | 16.0 | 15.0 | 17.0 | 14.5 | 14.0 | 12.0 | 15.5 | 13.5 | 22.0 | 20.5 | 18.0 | 16.0 |
| 31 | -- | -- | 16.5 | 16.5 | -- | -- | 18.0 | 15.0 | 23.0 | 21.5 | -- | -- |
| AVG | 14.5 | 13.0 | 15.0 | 14.0 | 15.5 | 13.5 | 17.0 | 15.0 | 17.5 | 15.5 | 18.0 | 16.5 |

## 07076640 LITTLE RED RIVER NEAR WEST POINT, ARK.

LOCATION.--Lat 35°12', long 91°34', in NE¼ sec.29, T.7 N., R.5 W., White County, temperature recorder on right bank, 2.5 miles east of West Point, 7.4 miles upstream from Big Mingo Creek, and 16 miles upstream from mouth.

DRAINAGE AREA.--1,701 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1966 to September 1969, October 1970 to September 1972.

EXTREMES.--Current year:
Water temperatures: Maximum, 21.5°C Sept. 2-5, 8; minimum, 4.5°C on several days during January and February.

Period of record:
Water temperatures: Maximum, 25.0°C July 3, 4, 1969; minimum, 2.0°C Jan. 20, 1967.

REMARKS.--Flow regulated by upstream reservoir. Records furnished by Arkansas Game and Fish Commission, Fisheries Division, Lonoke, Ark.

### TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS RECORDING THERMOMETER)

| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1 | 12.0 | 12.0 | 17.0 | 17.0 | 8.0 | 7.0 | 8.5 | 8.0 | 5.0 | 4.5 | 10.5 | 10.0 |
| 2 | 12.0 | 12.0 | 17.0 | 16.5 | 7.0 | 6.5 | 8.0 | 8.0 | 5.0 | 4.5 | 10.5 | 10.0 |
| 3 | 12.0 | 12.0 | 16.5 | 15.5 | 6.5 | 6.5 | 8.0 | 8.0 | 4.5 | 4.5 | 10.0 | 9.5 |
| 4 | 13.0 | 12.0 | 15.5 | 14.5 | 6.5 | 6.5 | 8.0 | 6.5 | 5.0 | 4.5 | 9.5 | 8.5 |
| 5 | 13.5 | 13.0 | 14.5 | 14.0 | 6.5 | 6.5 | 6.5 | 5.5 | 5.5 | 5.0 | 8.5 | 8.0 |
| 6 | 14.0 | 13.5 | 14.5 | 13.5 | 6.5 | 6.5 | 5.5 | 5.5 | 5.5 | 5.0 | 8.5 | 8.0 |
| 7 | 15.0 | 14.0 | 13.5 | 13.0 | 6.5 | 6.5 | 5.5 | 5.5 | 5.5 | 5.5 | 8.5 | 8.0 |
| 8 | 15.5 | 15.0 | 13.0 | 13.0 | 7.0 | 6.5 | -- | -- | 5.5 | 4.5 | 8.5 | 8.0 |
| 9 | 16.0 | 15.5 | 13.0 | 12.0 | 7.0 | 7.0 | -- | -- | 5.0 | 4.5 | 9.0 | 8.0 |
| 10 | 16.0 | 15.5 | 12.0 | 11.0 | 10.0 | 7.0 | 7.0 | 7.0 | 5.5 | 5.0 | 9.0 | 8.5 |
| 11 | 15.5 | 15.5 | 11.0 | 10.5 | 10.0 | 10.0 | 7.0 | 7.0 | 5.5 | 5.0 | 10.0 | 9.0 |
| 12 | 15.5 | 15.5 | 10.5 | 10.5 | 10.5 | 10.0 | 7.0 | 7.0 | 5.5 | 5.5 | 10.0 | 10.0 |
| 13 | 16.5 | 15.5 | 10.5 | 10.5 | 10.0 | 10.0 | 7.0 | 7.0 | 6.0 | 5.5 | 11.0 | 10.0 |
| 14 | 16.5 | 16.0 | 10.5 | 10.5 | 10.0 | 10.0 | 7.0 | 6.5 | 6.5 | 6.0 | 12.0 | 11.0 |
| 15 | 16.5 | 16.0 | 11.0 | 10.5 | 10.0 | 9.5 | 6.5 | 5.5 | 7.0 | 6.5 | 13.5 | 12.0 |
| 16 | 16.5 | 16.5 | 11.0 | 11.0 | 9.5 | 9.0 | 5.5 | 5.5 | 7.0 | 6.5 | 14.5 | 13.5 |
| 17 | 17.0 | 16.5 | 11.5 | 11.0 | 9.5 | 9.5 | 5.5 | 5.5 | 8.0 | 7.0 | 14.5 | 13.5 |
| 18 | 18.0 | 17.0 | 12.0 | 11.5 | 9.5 | 9.0 | 5.5 | 5.5 | 7.0 | 7.0 | 13.5 | 11.5 |
| 19 | 18.0 | 18.0 | 12.0 | 11.5 | 9.0 | 8.5 | 5.5 | 4.5 | 7.0 | 7.0 | 11.5 | 11.0 |
| 20 | 18.0 | 18.0 | 12.0 | 11.0 | 8.5 | 8.0 | 4.5 | 4.5 | 7.0 | 6.5 | 11.5 | 11.0 |
| 21 | 18.0 | 18.0 | 11.5 | 11.0 | 8.0 | 7.0 | 6.5 | 4.5 | 7.0 | 7.0 | 13.5 | 11.0 |
| 22 | 18.5 | 18.0 | 11.0 | 10.5 | 7.0 | 7.0 | 8.0 | 6.5 | 7.0 | 7.0 | 13.5 | 11.5 |
| 23 | 18.5 | 18.5 | 10.5 | 10.0 | 7.0 | 7.0 | 8.5 | 8.0 | 7.0 | 7.0 | 11.5 | 11.0 |
| 24 | 18.5 | 18.5 | 10.0 | 8.5 | 8.0 | 7.0 | 9.0 | 8.5 | 8.0 | 7.0 | 11.0 | 10.5 |
| 25 | 18.5 | 18.0 | 8.5 | 8.5 | 8.5 | 8.0 | 9.0 | 8.5 | 8.0 | 8.0 | 10.5 | 9.5 |
| 26 | 18.0 | 18.0 | 8.5 | 8.5 | 8.5 | 8.0 | 8.5 | 8.5 | 8.5 | 8.0 | 9.5 | 9.0 |
| 27 | 18.5 | 17.0 | 8.5 | 8.0 | 8.5 | 8.5 | 8.5 | 8.0 | 8.5 | 8.0 | 9.0 | 9.0 |
| 28 | 18.0 | 17.0 | 8.0 | 8.0 | 9.0 | 8.5 | 8.0 | 5.5 | 9.0 | 8.5 | 10.0 | 9.0 |
| 29 | 17.0 | 16.5 | 8.0 | 8.0 | 9.5 | 9.0 | 5.5 | 5.5 | 10.0 | 9.0 | 11.0 | 10.0 |
| 30 | 17.0 | 16.5 | 8.0 | 8.0 | 10.0 | 9.5 | 5.5 | 5.5 | -- | -- | 10.0 | 9.0 |
| 31 | 17.0 | 16.5 | -- | -- | 9.5 | 8.5 | 5.5 | 5.5 | -- | -- | 9.5 | 9.0 |
| AVG | 16.0 | 16.0 | 12.0 | 11.0 | 8.5 | 8.0 | 7.0 | 6.5 | 6.5 | 6.0 | 11.0 | 10.0 |

| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1 | 10.0 | 9.0 | -- | -- | 16.5 | 15.5 | 14.5 | 14.0 | 16.0 | 13.5 | 21.0 | 20.5 |
| 2 | 10.0 | 9.5 | -- | -- | 17.0 | 16.5 | 15.0 | 14.5 | 18.5 | 16.0 | 21.5 | 21.0 |
| 3 | 10.5 | 10.0 | -- | -- | 18.0 | 17.0 | -- | -- | 16.5 | 14.5 | 21.5 | 21.0 |
| 4 | 11.0 | 10.0 | -- | -- | 17.0 | 16.5 | -- | -- | 14.5 | 14.0 | 21.5 | 21.5 |
| 5 | 11.5 | 11.0 | 15.0 | 15.0 | 17.0 | 16.5 | -- | -- | 14.0 | 13.5 | 21.5 | 21.0 |
| 6 | 12.0 | 11.0 | 15.0 | 14.5 | 18.5 | 16.5 | 18.5 | 18.5 | 13.5 | 13.0 | 21.0 | 21.0 |
| 7 | 13.5 | 12.0 | 14.5 | 14.5 | 18.0 | 14.0 | 19.5 | 18.5 | 13.5 | 13.0 | 21.0 | 21.0 |
| 8 | 13.0 | 11.5 | 14.5 | 14.5 | 14.0 | 13.0 | 20.0 | 19.0 | 17.0 | 14.0 | 21.5 | 21.0 |
| 9 | 11.5 | 10.5 | 15.0 | 14.5 | 13.0 | 12.0 | 20.0 | 19.5 | 18.5 | 16.0 | 21.0 | 16.5 |
| 10 | 11.0 | 10.5 | 15.0 | 15.0 | 12.0 | 12.0 | 21.0 | 19.5 | 16.0 | 14.5 | 16.5 | 15.0 |
| 11 | 13.0 | 10.5 | 15.5 | 15.0 | 12.0 | 11.5 | 21.0 | 19.5 | 15.0 | 14.0 | 16.0 | 15.5 |
| 12 | 14.0 | 13.0 | 16.5 | 15.5 | 12.0 | 11.5 | 19.5 | 15.5 | 16.0 | 15.0 | 17.0 | 15.5 |
| 13 | 13.5 | 13.0 | 16.5 | 14.5 | 14.5 | 12.0 | 15.5 | 15.0 | 16.5 | 16.0 | 18.0 | 16.5 |
| 14 | 14.0 | 13.0 | 14.5 | 14.0 | 17.0 | 14.5 | 15.0 | 14.5 | 16.5 | 16.5 | 17.0 | 15.5 |
| 15 | 15.0 | 14.0 | 14.0 | 14.0 | 17.0 | 17.0 | 16.0 | 15.0 | 20.0 | 16.5 | 15.5 | 15.5 |
| 16 | 15.5 | 15.0 | 14.5 | 14.0 | 17.0 | 16.5 | 16.0 | 15.5 | 20.5 | 20.0 | 15.5 | 15.5 |
| 17 | 15.5 | 15.0 | 16.0 | 14.5 | 18.0 | 16.5 | 16.0 | 16.0 | 20.5 | 18.0 | 15.5 | 15.5 |
| 18 | 16.5 | 15.0 | 17.0 | 13.0 | 17.0 | 16.5 | 19.0 | 16.0 | 18.0 | 16.0 | 16.0 | 15.5 |
| 19 | 16.5 | 14.5 | 13.0 | 11.5 | 17.0 | 16.5 | 19.0 | 16.0 | 16.0 | 15.0 | 18.5 | 16.0 |
| 20 | 14.5 | 11.0 | 11.5 | 11.5 | 20.0 | 17.0 | 16.0 | 15.0 | 15.0 | 14.0 | 18.5 | 14.5 |
| 21 | 11.0 | 10.5 | 11.5 | 11.5 | 19.5 | 16.0 | 15.0 | 14.5 | 14.5 | 14.5 | 14.5 | 14.0 |
| 22 | 13.5 | 10.5 | 11.5 | 11.5 | 16.0 | 13.5 | 14.5 | 14.0 | 16.5 | 14.0 | 14.0 | 14.0 |
| 23 | 14.0 | 13.5 | 13.5 | 11.5 | 14.0 | 13.5 | 14.5 | 14.0 | 16.5 | 16.0 | 14.0 | 14.0 |
| 24 | 14.5 | 14.0 | 14.5 | 13.5 | 14.5 | 14.0 | 15.0 | 14.5 | 16.0 | 14.5 | 14.5 | 14.0 |
| 25 | 15.5 | 14.5 | 18.0 | 11.5 | 15.0 | 14.0 | 17.0 | 14.5 | 15.5 | 14.5 | 15.5 | 14.5 |
| 26 | 15.5 | 15.5 | 15.5 | 13.5 | 14.0 | 13.5 | 17.0 | 14.0 | 16.5 | 15.5 | 16.5 | 15.5 |
| 27 | 16.0 | 15.5 | 13.5 | 13.0 | 15.5 | 13.5 | 14.0 | 13.5 | 18.0 | 16.5 | 18.0 | 16.5 |
| 28 | 16.0 | 16.0 | 14.5 | 13.5 | 15.5 | 13.5 | 13.5 | 13.5 | 18.0 | 17.0 | 18.0 | 18.0 |
| 29 | 16.0 | 16.0 | 14.5 | 14.0 | 13.5 | 13.5 | 14.0 | 13.5 | 19.0 | 18.0 | 18.5 | 18.0 |
| 30 | 16.0 | 16.0 | 14.5 | 14.0 | 14.5 | 13.5 | 13.5 | 13.5 | 20.0 | 19.0 | 18.5 | 18.5 |
| 31 | -- | -- | 15.5 | 14.5 | -- | -- | 13.5 | 13.5 | 21.0 | 20.0 | -- | -- |
| AVG | 13.5 | 13.0 | 14.5 | 13.5 | 16.0 | 14.5 | 16.5 | 15.5 | 17.0 | 15.5 | 18.0 | 17.0 |

## 07076750 WHITE RIVER AT GEORGETOWN, ARK.

LOCATION.--Lat 35°07'42", long 91°27'00", in sec.20, T.6 N., R.4 W., White County, at National Weather Service gaging station on right bank at Georgetown, 9.2 miles downstream from Little Red River, and at mile 173.7.

DRAINAGE AREA.--22,300 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1966 to September 1972.

EXTREMES.--Current year:*
Water temperatures: Maximum, 27.0°C July 1; minimum, 3.5°C Jan. 17-19, Feb. 7, 8.

Period of record:
Water temperatures: Maximum, 28.5°C July 10, 11, 1971; minimum, freezing point Jan. 9, 10, 1970.

REMARKS.--Flow regulated by upstream reservoirs. Records furnished by Arkansas Game and Fish Commission, Fisheries Division, Lonoke, Ark.

### TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
### (CONTINUOUS RECORDING THERMOMETER)

| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1 | 21.5 | 20.0 | 18.0 | 18.0 | 7.0 | 7.0 | 10.0 | 9.5 | 4.5 | 4.5 | 11.5 | 10.5 |
| 2 | 20.0 | 18.0 | 18.0 | 18.0 | 7.0 | 6.0 | 9.5 | 9.0 | 4.5 | 4.5 | 11.5 | 10.5 |
| 3 | 18.0 | 17.0 | 18.0 | 16.5 | 6.0 | 5.5 | 9.0 | 9.0 | 4.5 | 4.0 | 10.5 | 10.0 |
| 4 | 18.0 | 17.0 | 16.5 | 15.5 | 5.5 | 5.5 | 9.0 | 7.0 | 4.5 | 4.0 | 10.5 | 9.5 |
| 5 | 18.5 | 17.0 | 15.5 | 15.0 | 6.0 | 5.5 | 7.0 | 6.0 | 4.5 | 4.0 | 9.5 | 9.0 |
| 6 | 18.5 | 18.0 | 15.0 | 13.5 | 6.0 | 5.5 | 6.0 | 5.0 | 4.0 | 4.0 | 9.0 | 8.5 |
| 7 | 18.5 | 18.5 | 13.5 | 11.0 | 6.5 | 6.0 | 5.0 | 4.5 | 4.0 | 3.5 | 9.5 | 9.0 |
| 8 | 18.5 | 18.0 | 11.0 | 10.0 | 7.0 | 6.5 | 5.0 | 4.5 | 4.5 | 3.5 | 10.0 | 9.0 |
| 9 | 18.5 | 18.5 | 10.5 | 10.0 | 8.5 | 7.0 | 5.5 | 5.0 | 4.5 | 4.5 | 10.0 | 9.5 |
| 10 | 18.5 | 17.0 | 10.5 | 10.5 | 9.5 | 8.5 | 5.5 | 5.5 | 4.5 | 4.5 | 10.0 | 9.5 |
| 11 | 17.0 | 17.0 | 10.5 | 10.0 | 9.5 | 9.5 | 6.0 | 5.5 | 4.5 | 4.0 | 10.5 | 9.5 |
| 12 | 18.0 | 17.0 | 10.5 | 10.0 | 10.5 | 9.5 | 6.0 | 5.5 | 4.5 | 4.5 | 11.5 | 10.5 |
| 13 | 18.5 | 18.0 | 11.0 | 10.0 | 10.0 | 10.0 | 6.5 | 6.0 | 5.0 | 4.5 | 13.0 | 11.5 |
| 14 | 18.5 | 18.0 | 12.0 | 11.0 | 10.0 | 10.0 | 6.0 | 5.5 | 6.0 | 5.0 | 13.5 | 12.0 |
| 15 | 18.5 | 18.5 | 13.0 | 12.0 | 10.0 | 10.0 | 5.5 | 5.0 | 6.5 | 6.0 | 14.0 | 13.0 |
| 16 | 18.5 | 18.5 | 13.5 | 13.0 | 10.0 | 10.0 | 5.0 | 4.0 | 6.5 | 6.5 | 14.0 | 13.5 |
| 17 | 19.0 | 18.5 | 13.5 | 13.5 | 10.0 | 10.0 | 4.0 | 3.5 | 7.0 | 6.5 | 14.0 | 13.5 |
| 18 | 19.5 | 19.0 | 14.0 | 13.5 | 10.0 | 9.5 | 4.0 | 3.5 | 7.0 | 7.0 | 15.0 | 14.0 |
| 19 | 19.5 | 19.0 | 14.0 | 13.5 | 9.5 | 9.5 | 4.0 | 3.5 | 7.0 | 7.0 | 14.5 | 14.0 |
| 20 | 19.5 | 19.5 | 13.0 | 13.0 | 9.5 | 9.5 | 4.5 | 4.0 | 7.0 | 7.0 | 14.0 | 13.5 |
| 21 | 20.0 | 19.5 | 13.0 | 11.0 | 9.5 | 9.0 | 5.0 | 4.5 | 7.0 | 6.5 | 15.0 | 14.0 |
| 22 | 20.C | 19.5 | 11.0 | 10.0 | 9.0 | 8.5 | 5.5 | 5.0 | 7.0 | 7.0 | 15.0 | 14.0 |
| 23 | 19.5 | 19.5 | 10.0 | 9.5 | 8.5 | 8.0 | 6.5 | 5.5 | 8.0 | 7.0 | 14.5 | 14.5 |
| 24 | 19.5 | 19.0 | 9.5 | 9.0 | 8.0 | 8.0 | 8.0 | 6.5 | 8.5 | 8.0 | 15.0 | 14.0 |
| 25 | 19.0 | 18.5 | 9.5 | 9.0 | 8.5 | 8.0 | 8.0 | 8.0 | 8.5 | 8.5 | 14.0 | 13.0 |
| 26 | 19.0 | 18.5 | 8.5 | 8.0 | 9.0 | 8.5 | 8.0 | 7.0 | 8.5 | 8.5 | 13.0 | 13.0 |
| 27 | 18.5 | 18.5 | 8.0 | 8.0 | 10.0 | 9.0 | 8.0 | 7.0 | 9.0 | 8.5 | 13.0 | 12.0 |
| 28 | 18.5 | 18.0 | 8.0 | 7.0 | 10.0 | 10.0 | 7.0 | 6.0 | 9.5 | 8.5 | 12.0 | 11.0 |
| 29 | 18.0 | 18.0 | 7.0 | 7.0 | 10.0 | 10.0 | 6.0 | 5.5 | 10.5 | 9.5 | 11.0 | 10.5 |
| 30 | 18.0 | 18.0 | 7.0 | 7.0 | 10.5 | 10.0 | 5.5 | 4.5 | -- | -- | 11.0 | 10.5 |
| 31 | 18.5 | 18.0 | -- | -- | 10.0 | 10.0 | 4.5 | 4.0 | -- | -- | 12.0 | 10.5 |
| AVG | 19.0 | 18.0 | 12.0 | 11.5 | 9.0 | 8.5 | 6.0 | 5.5 | 6.0 | 6.0 | 12.5 | 11.5 |

| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1 | 13.0 | 11.5 | -- | -- | 24.0 | 23.5 | 27.0 | 25.5 | 24.5 | 23.5 | 26.0 | 25.5 |
| 2 | 13.0 | 12.0 | 18.0 | 17.0 | 24.0 | 23.0 | 26.0 | 25.5 | 24.0 | 23.0 | 26.0 | 26.0 |
| 3 | 13.0 | 13.0 | 17.0 | 17.0 | 24.0 | 23.5 | 25.5 | 21.5 | 25.5 | 23.5 | 26.0 | 25.0 |
| 4 | -- | -- | 18.0 | 17.0 | 24.5 | 23.5 | 23.5 | 21.0 | -- | -- | 25.0 | 24.0 |
| 5 | -- | -- | 18.5 | 18.0 | 24.5 | 24.0 | 24.0 | 23.5 | 25.5 | 24.5 | 24.0 | 23.5 |
| 6 | -- | -- | 19.0 | 18.5 | 25.0 | 24.0 | 24.0 | 23.5 | 25.5 | 24.5 | 24.0 | 23.5 |
| 7 | 15.5 | 14.5 | 19.0 | 19.0 | 25.0 | 24.0 | 24.0 | 23.5 | 24.5 | 24.0 | 24.5 | 23.5 |
| 8 | 15.5 | 15.0 | 19.5 | 19.0 | 25.0 | 24.0 | 24.0 | 23.5 | 24.0 | 23.0 | 25.5 | 24.5 |
| 9 | 15.5 | 14.5 | 19.5 | 19.5 | 25.0 | 24.0 | 25.0 | 24.0 | 24.0 | 23.0 | 25.5 | 25.0 |
| 10 | 16.0 | 15.0 | 19.5 | 19.5 | 25.0 | 23.5 | 25.5 | 25.0 | 25.0 | 23.5 | 25.0 | 24.5 |
| 11 | 16.0 | 15.5 | 19.5 | 19.5 | 25.0 | 23.5 | 26.0 | 25.5 | 25.5 | 24.5 | 25.5 | 25.0 |
| 12 | 17.0 | 16.0 | 19.5 | 19.0 | 25.0 | 24.5 | 26.5 | 25.5 | 25.5 | 25.0 | 25.5 | 25.0 |
| 13 | 18.5 | 17.0 | 19.0 | 18.5 | 24.5 | 23.5 | 26.5 | 26.0 | 25.5 | 24.5 | 25.5 | 24.0 |
| 14 | 19.0 | 18.5 | 19.5 | 19.0 | 24.0 | 23.5 | 26.5 | 25.5 | 26.5 | 25.5 | 26.0 | 25.0 |
| 15 | 19.5 | 19.0 | 19.5 | 19.0 | 25.5 | 23.5 | 25.5 | 24.0 | 26.5 | 25.5 | 26.0 | 25.0 |
| 16 | 20.0 | 19.5 | 20.0 | 19.5 | 25.5 | 25.0 | 25.0 | 23.5 | 26.0 | 25.0 | 25.5 | 23.5 |
| 17 | 20.0 | 19.0 | 20.5 | 20.0 | 25.0 | 24.5 | 25.5 | 24.5 | 25.5 | 24.5 | 23.5 | 21.0 |
| 18 | 19.0 | 18.5 | 21.0 | 20.5 | 25.5 | 24.5 | 25.5 | 24.5 | 24.5 | 23.5 | 22.0 | 21.0 |
| 19 | 19.5 | 18.5 | 21.5 | 21.0 | 26.0 | 25.5 | 24.5 | 24.0 | 24.0 | 23.0 | 23.5 | 22.0 |
| 20 | 19.5 | 19.0 | 21.5 | 20.5 | 26.5 | 26.0 | 25.5 | 24.5 | 23.5 | 23.0 | 23.5 | 22.0 |
| 21 | 19.0 | 18.5 | 20.5 | 20.0 | 26.0 | 25.5 | 26.5 | 24.5 | 24.0 | 23.0 | 24.0 | 23.0 |
| 22 | 18.5 | 18.0 | 21.0 | 20.5 | 26.0 | 25.0 | 26.0 | 24.0 | 24.0 | 22.0 | 24.0 | 21.5 |
| 23 | 18.5 | 18.0 | 21.5 | 21.0 | 26.0 | 24.5 | 25.5 | 24.0 | 22.0 | 22.0 | 21.5 | 20.0 |
| 24 | 18.0 | 17.0 | 22.0 | 21.0 | 25.5 | 24.5 | 24.5 | 23.0 | 23.5 | 22.0 | 20.0 | 20.0 |
| 25 | 18.0 | 17.0 | 23.0 | 22.0 | 24.5 | 24.0 | 23.5 | 23.0 | 22.0 | 22.0 | 20.5 | 20.0 |
| 26 | 18.0 | 17.0 | 23.5 | 22.0 | 25.5 | 23.5 | 24.0 | 22.0 | 23.5 | 22.0 | 21.5 | 20.5 |
| 27 | 18.0 | 18.0 | 24.5 | 23.5 | 26.0 | 24.0 | 25.5 | 24.0 | 24.5 | 23.0 | 22.0 | 21.5 |
| 28 | 18.0 | 16.5 | 24.5 | 23.5 | 25.0 | 24.0 | 25.5 | 24.5 | 24.5 | 24.0 | 23.5 | 22.0 |
| 29 | 16.5 | 16.5 | 24.0 | 23.5 | 25.5 | 24.5 | 25.5 | 23.5 | 25.0 | 24.0 | 23.5 | 21.5 |
| 30 | -- | -- | 24.0 | 24.0 | 26.5 | 24.5 | 24.0 | 23.5 | 25.5 | 25.0 | 21.5 | 20.5 |
| 31 | -- | -- | 24.0 | 23.5 | -- | -- | 23.5 | 23.0 | 25.5 | 25.5 | -- | -- |
| AVG | 17.5 | 16.5 | 20.5 | 20.0 | 25.0 | 24.0 | 25.0 | 24.0 | 24.5 | 23.5 | 24.0 | 23.0 |

## 07077080 LITTLE CACHE RIVER DITCH NO. 1 NEAR MCDOUGAL, ARK.
(Formerly published as Cache River near McDougal)

LOCATION.--Lat 36°26'01", long 90°21'30", in NW¼NE¼ sec.30, T.21 N., R.7 E., Clay County, at bridge on U.S. Highway 62, 1.7 miles east of McDougal, and 3.7 miles upstream from Little Cache River ditch.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 6 | 0.5 | | | | | | | | | |
| OCT. 20 | 0.5 | | | | | | | | | |
| NOV. 2 | 0.5 | | | | | | | | | |
| NOV. 10 | 0.5 | | | | | | | | | |
| DEC. 1 | 0.5 | | | | | | | | | |
| DEC. 15 | 46 | | | | | 11 | | 4 | | |
| JAN. 17 | 0 | | | | | | | | | |
| FEB. 1 | 0 | | | | | | | | | |
| FEB. 15 | 8 | | | | | 21 | | 5 | | |
| MAR. 1 | 7 | | | | | 31 | | 6 | | |
| MAR. 15 | 2 | | | | | 26 | | 8 | | |
| APR. 5 | 14 | | | | | 29 | | 6 | | |
| APR. 17 | 301 | | | | | 11 | | 4 | | |
| MAY 2 | 275 | | | 5.6 | 4.4 | 18 | 5K | 4 | 91.000 | 0.030 |
| MAY 16 | 8 | | | | | 43 | | 7 | | |
| JUNE 7 | 1 | | | | | 260 | | 17 | | |
| JUNE 21 | 1 | | | | | 132 | | 8 | | |
| JULY 5 | 13 | | | | | 14 | | 8 | | |
| JULY 17 | 48 | | | | | 10 | | 4 | | |
| AUG. 1 | 4 | 2650 | 525.0 | 18.0 | 2.0 | 44 | 26 | 6 | 1.200 | 0.200 |
| AUG. 15 | 9 | | | | | 127 | | 5 | | |
| SEP. 6 | 2 | | | | | 263 | | 13 | | |
| SEP. 20 | 2 | | | | | 80 | | 12 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| DEC. 15 | | | | | | 36 | 6.60 | 13.0 | | 1500.0 |
| FEB. 15 | | | | | | 59 | 6.90 | 6.0 | | 200.0 |
| MAR. 1 | | | | | | 83 | 6.60 | 14.0 | | 190.0 |
| MAR. 15 | | | | | | 100 | 7.00 | 13.0 | | 250.0 |
| APR. 5 | | | | | | 82 | 6.50 | 10.0 | | 200.0 |
| APR. 17 | | | | | | 53 | 6.40 | 17.0 | | 450.0 |
| MAY 2 | 233 | 315 | 548 | 32 | 14.0 | 50 | 6.70 | 18.0 | 480 | 400.0 |
| MAY 16 | | | | | | 122 | 7.10 | 17.0 | | 140.0 |
| JUNE 7 | | | | | | 444 | 8.10 | 23.0 | | 30.0 |
| JUNE 21 | | | | | | 238 | 7.60 | 22.0 | | 110.0 |
| JULY 5 | | | | | | 51 | 8.00 | 20.0 | | 500.0 |
| JULY 17 | | | | | | 51 | 5.50 | 25.0 | | 800.0 |
| AUG. 1 | 202 | 328 | 530 | 50 | 40.0 | 56 | 6.80 | 27.0 | 240 | 360.0 |
| AUG. 15 | | | | | | 221 | 7.50 | 26.0 | | 60.0 |
| SEP. 6 | | | | | | 473 | 7.90 | 21.0 | | 25.0K |
| SEP. 20 | | | | | | 157 | 7.30 | 27.0 | | 90.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MPN-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| DEC. 15 | 6.4 | | | | | |
| FEB. 15 | 9.1 | | 3.3 | 50 | 370 | 160 |
| MAR. 1 | 7.0 | | 4.8 | | | |
| MAR. 15 | 7.0 | | 2.9 | | | |
| MAR. 21 | | | | 44 | 400 | 100 |
| APR. 5 | 7.4 | | 3.1 | | | |
| APR. 17 | 6.0 | | 4.1 | | | |
| MAY 2 | 7.4 | | 4.7 | 20L | | |
| MAY 16 | 3.9 | | 5.0 | | | |
| JUNE 7 | 7.6 | | 3.4 | | | |
| JUNE 21 | 4.0 | | 5.2 | | | |
| JULY 5 | 5.9 | 64.0 | 2.9 | | | |
| JULY 17 | 5.5 | 65.0 | 2.4 | | | |
| AUG. 1 | 3.4 | 42.0 | 1.0 | | 2200 | 273 |
| AUG. 15 | 4.5 | 55.0 | 1.5 | | | |
| SEP. 6 | 7.2 | 80.0 | 1.5 | | | |
| SEP. 20 | 9.3 | 115.0 | 9.1L | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 1 | | 2K | 100K | | 160 | 80K | | 50K | 80 |
| SEP. 20 | | | | | | | | | |

K Less than.
L Greater than.

## 07077800 WHITE RIVER AT CLARENDON, ARK.

LOCATION.--Lat 34°41'08", long 91°18'55", in W½ sec.22, T.1 N., R.3 W., Monroe County, at gaging station at St. Louis-Southwestern Railroad bridge at Clarendon, 1.1 miles downstream from Cache River, and at mile 100.1.

DRAINAGE AREA.--25,497 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1947 to September 1967, October 1970 to September 1972.
Water temperature: October 1948 to September 1965.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | MEAN DISCHARGE (CFS) | DISSOLVED SILICA (SIO2) (MG/L) | DISSOLVED IRON (FE) (UG/L) | DISSOLVED MANGANESE (MN) (UG/L) | DISSOLVED CALCIUM (CA) (MG/L) | DISSOLVED MAGNESIUM (MG) (MG/L) | DISSOLVED SODIUM (NA) (MG/L) | DISSOLVED POTASSIUM (K) (MG/L) | BICARBONATE (HCO3) (MG/L) | CARBONATE (CO3) (MG/L) | ALKALINITY AS CACO3 (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 21... | 7200 | 5.3 | 30 | 60 | 38 | 17 | 5.4 | 1.2 | 200 | 0 | 164 |
| DEC. 08... | 7000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN. 19... | 19600 | -- | 10 | 20 | -- | -- | -- | -- | 152 | 0 | 125 |
| FEB. 29... | 10700 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR. 29... | 17100 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR. 26... | 31700 | 7.3 | 100 | 10 | 23 | 8.0 | 4.1 | 2.5 | 108 | 0 | 88 |
| JUNE 07... | 15200 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JULY 19... | 14200 | -- | 0 | 0 | -- | -- | -- | -- | -- | -- | -- |
| AUG. 30... | 9500 | -- | -- | -- | -- | -- | -- | -- | 168 | 0 | 138 |
| SEP. 28... | 10400 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | DISSOLVED SULFATE (SO4) (MG/L) | DISSOLVED CHLORIDE (CL) (MG/L) | DISSOLVED FLUORIDE (F) (MG/L) | DISSOLVED NITRATE (N) (MG/L) | DISSOLVED AMMONIA NITROGEN (N) (MG/L) | ORGANIC NITROGEN (N) (MG/L) | TOTAL PHOSPHORUS (P) (MG/L) | DISSOLVED SOLIDS (TONS PER AC-FT) | DISSOLVED SOLIDS (TONS PER DAY) | HARDNESS (CA,MG) (MG/L) | NONCARBONATE HARDNESS (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 21... | 3.8 | 8.4 | .0 | .00 | .01 | .21 | .01 | .24 | 3460 | 160 | 1 |
| DEC. 08... | -- | -- | -- | -- | .00 | .00 | .05 | -- | -- | -- | -- |
| JAN. 19... | -- | -- | -- | .40 | .05 | .12 | .15 | -- | -- | -- | -- |
| FEB. 29... | -- | -- | -- | .20 | .02 | .20 | .00 | -- | -- | -- | -- |
| MAR. 29... | -- | -- | -- | .18 | .02 | .25 | .12 | -- | -- | -- | -- |
| APR. 26... | 6.1 | 5.1 | .0 | .54 | .03 | .45 | .01 | -- | -- | 90 | 2 |
| JUNE 07... | -- | -- | -- | .25 | .07 | .16 | .06 | -- | -- | -- | -- |
| JULY 19... | -- | -- | -- | .22 | .03 | .30 | .14 | -- | -- | -- | -- |
| AUG. 30... | -- | -- | -- | .04 | -- | -- | .09 | -- | -- | -- | -- |
| SEP. 28... | -- | -- | -- | .16 | .01 | .38 | .00 | -- | -- | -- | -- |

| DATE | PERCENT SODIUM | SODIUM ADSORPTION RATIO | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | COLOR (PLATINUM-COBALT UNITS) | TURBIDITY (MG/L) | CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) | BIOCHEMICAL OXYGEN DEMAND (MG/L) | IMMEDIATE COLIFORM (COL. PER 100 ML) | FECAL COLIFORM (COL. PER 100 ML) | STREPTOCOCCI (COLONIES PER 100 ML) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 21... | 7 | .2 | 333 | 8.0 | 2 | 25 | 8 | 2.6 | -- | -- | -- |
| DEC. 08... | -- | -- | 340 | -- | 5 | 15 | 6 | 1.7 | 1800 | E27 | 57 |
| JAN. 19... | -- | -- | 261 | 7.7 | 10 | 30 | 8 | 1.0 | 330 | E60 | 18 |
| FEB. 29... | -- | -- | 284 | 8.0 | 15 | 55 | 5 | 1.9 | E88 | E7 | 6 |
| MAR. 29... | -- | -- | -- | -- | 10 | 30 | 6 | 2.0 | E190 | E20 | 41 |
| APR. 26... | 9 | .2 | 208 | 8.1 | 80 | 130 | 5 | 8.2 | E7800 | E4100 | 870 |
| JUNE 07... | -- | -- | 264 | 7.7 | 15 | 30 | 13 | 2.7 | E280 | E33 | 52 |
| JULY 19... | -- | -- | -- | -- | 5 | 40 | 10 | 1.2 | 380 | -- | 60 |
| AUG. 30... | -- | -- | 284 | 8.1 | 10 | 25 | -- | 1.9 | E75 | 100 | 42 |
| SEP. 28... | -- | -- | -- | -- | 5 | 25 | 15 | 2.7 | 440 | 120 | 570 |

E ESTIMATED.

## 07077800 WHITE RIVER AT CLARENDON, ARK.--continued

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DIS-SOLVED ARSENIC (AS) (UG/L) | DIS-SOLVED CAD-MIUM (CD) (UG/L) | HEXA-VALENT CHRO-MIUM (CR6) (UG/L) | DIS-SOLVED COBALT (CO) (UG/L) | DIS-SOLVED COPPER (CU) (UG/L) | DIS-SOLVED LEAD (PB) (UG/L) | DIS-SOLVED LITHIUM (LI) (UG/L) | DIS-SOLVED MERCURY (HG) (UG/L) | DIS-SOLVED NICKEL (NI) (UG/L) | DIS-SOLVED SILVER (AG) (UG/L) | DIS-SOLVED ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 21... | <10 | 0 | <10 | 0 | 2 | 0 | 0 | 2.7 | 1 | 2 | 50 |
| JAN. 19... | <10 | 0 | <10 | 0 | 3 | 2 | -- | .7 | 2 | 0 | 70 |
| APR. 26... | <10 | 0 | <10 | 1 | 7 | 0 | -- | <.5 | 0 | -- | 60 |
| JULY 19... | <10 | 0 | <10 | 0 | 2 | 2 | -- | <.5 | 2 | -- | 0 |

### FIELD ANALYSES

| DATE | MEAN DIS-CHARGE (CFS) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | DIS-SOLVED OXYGEN (MG/L) | PER-CENT SATUR-ATION |
|---|---|---|---|---|---|---|---|---|---|
| OCT. 21... | 7200 | -- | -- | -- | 348 | 8.2 | 21.5 | 8.3 | 93 |
| DEC. 08... | 7000 | -- | -- | -- | 340 | 7.8 | 9.5 | 7.6 | 66 |
| JAN. 19... | 19600 | -- | -- | -- | 255 | 7.9 | 7.0 | 8.0 | 66 |
| FEB. 29... | 10700 | -- | -- | -- | 274 | 8.0 | 13.5 | 9.2 | 88 |
| MAR. 29... | 17100 | 168 | 0 | 138 | 286 | 8.2 | 15.0 | 9.8 | 97 |
| APR. 26... | 31700 | 108 | 0 | 88 | 196 | 8.0 | 19.0 | 6.9 | 73 |
| JUNE 07... | 15200 | 156 | 0 | 128 | 253 | 7.9 | 27.0 | 10.2 | 128 |
| JULY 19... | 14200 | 160 | 0 | 131 | 270 | 8.2 | 29.5 | 7.8 | 101 |
| AUG. 30... | 9500 | 160 | 0 | 131 | 304 | 8.1 | 26.0 | 7.6 | 93 |
| SEP. 28... | 10400 | 156 | 0 | 128 | 273 | 8.1 | 24.0 | 7.5 | 88 |

< LESS THAN.

## 07077952 BIG CREEK NEAR POPLAR GROVE, ARK.

LOCATION.--Lat 34°30'17", long 90°50'59", in SE¼NW¼ sec.24, T.2 S., R.2 E., Phillips County, at gaging station near right bank on downstream side of bridge on county road, 600 ft downstream from small tributary, 0.9 mile northeast of Trenton, and 3.0 miles south of Poplar Grove.

DRAINAGE AREA.--464 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1972.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | MEAN DISCHARGE (CFS) | DISSOLVED SILICA (SIO2) (MG/L) | DISSOLVED IRON (FE) (UG/L) | DISSOLVED MANGANESE (MN) (UG/L) | DISSOLVED CALCIUM (CA) (MG/L) | DISSOLVED MAGNESIUM (MG) (MG/L) | DISSOLVED SODIUM (NA) (MG/L) | DISSOLVED POTASSIUM (K) (MG/L) | BICARBONATE (HCO3) (MG/L) | CARBONATE (CO3) (MG/L) | ALKALINITY AS CACO3 (MG/L) | DISSOLVED SULFATE (SO4) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 21... | 2.3 | 10 | 90 | 1230 | 50 | 23 | 18 | 4.5 | 272 | 0 | 223 | 6.6 |
| DEC. 08... | 27 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN. 19... | 501 | -- | 100 | 20 | -- | -- | -- | -- | 53 | 0 | 43 | -- |
| FEB. 29... | 68 | -- | -- | -- | -- | -- | -- | -- | 108 | 0 | 88 | -- |
| MAR. 29... | 64 | -- | -- | -- | -- | -- | -- | -- | 114 | 0 | 93 | -- |
| APR. 26... | 139 | 6.0 | 220 | 112 | 17 | 6.6 | 9.8 | 5.2 | 92 | 0 | 75 | 5.3 |
| JUNE 07... | 10 | -- | -- | -- | -- | -- | -- | -- | 164 | 0 | 134 | -- |
| JULY 19... | 193 | -- | 30 | 0 | -- | -- | -- | -- | 100 | 0 | 82 | -- |
| AUG. 30... | 36 | -- | -- | -- | -- | -- | -- | -- | 164 | 0 | 134 | -- |
| SEP. 28... | 210 | -- | -- | -- | -- | -- | -- | -- | 132 | 0 | 108 | -- |

| DATE | DISSOLVED CHLORIDE (CL) (MG/L) | DISSOLVED FLUORIDE (F) (MG/L) | DISSOLVED NITRATE (N) (MG/L) | DISSOLVED AMMONIA NITROGEN (N) (MG/L) | ORGANIC NITROGEN (N) (MG/L) | TOTAL PHOSPHORUS (P) (MG/L) | DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) | TOTAL FILTRABLE RESIDUE (MG/L) | DISSOLVED SOLIDS (TONS PER AC-FT) | DISSOLVED SOLIDS (TONS PER DAY) | TOTAL NONFILTRABLE RESIDUE (MG/L) | HARDNESS (CA,MG) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 21... | 18 | .0 | .30 | .00 | .61 | .07 | 278 | -- | .38 | 1.73 | -- | 220 |
| DEC. 08... | -- | -- | -- | .00 | .28 | .13 | -- | -- | -- | -- | -- | -- |
| JAN. 19... | -- | -- | -- | .07 | .50 | .21 | -- | 86 | -- | -- | 50 | -- |
| FEB. 29... | -- | -- | .20 | .05 | .56 | .07 | -- | -- | -- | -- | -- | -- |
| MAR. 29... | -- | -- | .16 | .08 | .50 | .28 | -- | -- | -- | -- | -- | -- |
| APR. 26... | 9.8 | .0 | .29 | .05 | .70 | .05 | 115 | -- | .16 | 43.2 | -- | 70 |
| JUNE 07... | -- | -- | .50 | .12 | .60 | .13 | -- | -- | -- | -- | -- | -- |
| JULY 19... | -- | -- | .27 | .03 | .52 | .32 | -- | 130 | -- | -- | 82 | -- |
| AUG. 30... | -- | -- | .18 | -- | -- | .23 | -- | -- | -- | -- | -- | -- |
| SEP. 28... | -- | -- | .29 | .04 | .20 | .26 | -- | -- | -- | -- | -- | -- |

| DATE | NONCARBONATE HARDNESS (MG/L) | PERCENT SODIUM | SODIUM ADSORPTION RATIO | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | COLOR (PLATINUM-COBALT UNITS) | TURBIDITY (MG/L) | CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) | BIOCHEMICAL OXYGEN DEMAND (MG/L) | IMMEDIATE COLIFORM (COL. PER 100 ML) | FECAL COLIFORM (COL. PER 100 ML) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 21... | 0 | 15 | .5 | 474 | 7.6 | 10 | 39 | 17 | 3.4 | -- | -- |
| DEC. 08... | -- | -- | -- | 375 | 7.6 | 10 | 25 | 26 | 4.0 | 2500 | -- |
| JAN. 19... | -- | -- | -- | 122 | 7.2 | 75 | 40 | 26 | 2.0 | E150 | 97 |
| FEB. 29... | -- | -- | -- | 244 | 7.6 | 60 | 45 | 24 | 2.9 | E250 | 240 |
| MAR. 29... | -- | -- | -- | 225 | 7.7 | 60 | 100 | 23 | 2.6 | 520 | 210 |
| APR. 26... | 0 | 22 | .5 | 182 | 7.5 | 80 | 35 | 23 | 8.2 | 2400 | 720 |
| JUNE 07... | -- | -- | -- | 279 | 7.7 | 25 | 160 | 29 | 2.3 | E15200 | 290 |
| JULY 19... | -- | -- | -- | 197 | 7.2 | 60 | 95 | 20 | 1.0 | 700 | -- |
| AUG. 30... | -- | -- | -- | 301 | 7.6 | 10 | 30 | -- | 5.5 | 650 | 230 |
| SEP. 28... | -- | -- | -- | 262 | 7.9 | 20 | 20 | 20 | 2.6 | 850 | E260 |

E ESTIMATED.

## 07077952 BIG CREEK NEAR POPLAR GROVE, ARK.--continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREP-TOCOCCI (COL-ONIES PER 100 ML) | ALDRIN (UG/L) | ALDRIN IN BOTTOM DE-POSITS (UG/KG) | CHLOR-DANE (UG/L) | CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG) | DDD (UG/L) | DDD IN BOTTOM DE-POSITS (UG/KG) | DDE (UG/L) | DDE IN BOTTOM DE-POSITS (UG/KG) | DDT (UG/L) | DDT IN BOTTOM DE-POSITS (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC. 08... | 1100 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN. 19... | 60 | .00 | <.2 | .0 | <1 | .00 | 46 | .00 | 8.8 | .00 | 150 |
| FEB. 29... | 200 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR. 29... | 190 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR. 26... | 500 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUNE 07... | 390 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JULY 19... | 400 | .00 | <.2 | .0 | <1 | .01 | 430 | .01 | 160 | .00 | 69 |
| AUG. 30... | 280 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP. 28... | 1200 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | DI-ELDRIN (UG/L) | DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG) | ENDRIN (UG/L) | ENDRIN IN BOTTOM DE-POSITS (UG/KG) | HEPTA-CHLOR (UG/L) | HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG) | HEPTA-CHLOR EPOXIDE (UG/L) | HEPTA-CHLOR EPOXIDE IN BOT-TOM DE-POSITS (UG/KG) | LINDANE (UG/L) | LINDANE IN BOTTOM DE-POSITS (UG/KG) | MALA-THION IN BOTTOM DE-POSITS (UG/KG) | METHYL PARA-THION IN BOT-TOM DE-POSITS (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN. 19... | .00 | <.2 | .00 | <.2 | .00 | <.2 | .00 | <.2 | .00 | <.2 | <.2 | <.2 |
| APR. 26... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JULY 19... | .01 | <.2 | .00 | <.2 | .00 | <.2 | .00 | <.2 | .00 | <.2 | -- | -- |

| DATE | PARA-THION IN BOTTOM DE-POSITS (UG/KG) | 2,4-D (UG/L) | 2,4-D IN BOTTOM DE-POSITS (UG/KG) | 2,4,5-T (UG/L) | 2,4,5-T IN BOTTOM DE-POSITS (UG/KG) | SILVEX (UG/L) | SILVEX IN BOTTOM DE-POSITS (UG/KG) | DIS-SOLVED ARSENIC (AS) (UG/L) | DIS-SOLVED CAD-MIUM (CD) (UG/L) | HEXA-VALENT CHRO-MIUM (CR6) (UG/L) | DIS-SOLVED COBALT (CO) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 21... | -- | -- | -- | -- | -- | -- | -- | 10 | 0 | <10 | 0 |
| JAN. 19... | <.2 | .00 | <.7 | .02 | <.2 | .00 | <.2 | 10 | 0 | <10 | 0 |
| APR. 26... | -- | -- | -- | -- | -- | -- | -- | 11 | 0 | <10 | 0 |
| JULY 19... | -- | .00 | <5.2 | .06 | <1.4 | .06 | <1.6 | <10 | 0 | <10 | 0 |

| DATE | DIS-SOLVED COPPER (CU) (UG/L) | DIS-SOLVED LEAD (PB) (UG/L) | DIS-SOLVED LITHIUM (LI) (UG/L) | DIS-SOLVED MERCURY (HG) (UG/L) | DIS-SOLVED NICKEL (NI) (UG/L) | DIS-SOLVED SILVER (AG) (UG/L) | DIS-SOLVED ZINC (ZN) (UG/L) | DIS-SOLVED GROSS ALPHA AS U-NAT. (PC/L) | DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L) | SUS-PENDED GROSS ALPHA AS U-NAT. (PC/L) | SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 21... | 5 | 1 | 0 | 4.3 | 7 | 2 | 40 | -- | -- | -- | -- |
| JAN. 19... | 4 | 2 | -- | 3.5 | 2 | 0 | 20 | .4 | 1.1 | 1.1 | 3.4 |
| APR. 26... | 7 | 0 | -- | <.5 | 0 | -- | 10 | -- | -- | -- | -- |
| JULY 19... | 5 | 1 | -- | <.5 | 0 | -- | 0 | <.6 | <1.7 | 2.2 | 6.5 |

< LESS THAN.

## 07077952 BIG CREEK NEAR POPLAR GROVE, ARK.--continued

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DIS-SOLVED GROSS BETA AS CS-137 (PC/L) | SUS-PENDED GROSS BETA AS CS-137 (PC/L) | DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L) | SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L) | DIS-SOLVED RA-226 (RADON METHOD) (PC/L) | DIS-SOLVED URANIUM (U) (UG/L) |
|---|---|---|---|---|---|---|
| JAN. 19... | 8.0 | 2.7 | 6.4 | 2.3 | .05 | .04 |
| JULY 19... | 9.8 | 5.2 | 7.9 | 4.2 | .04 | .08 |

### FIELD ANALYSES

| DATE | MEAN DIS-CHARGE (CFS) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | DIS-SOLVED OXYGEN (MG/L) | PER-CENT SATUR-ATION |
|---|---|---|---|---|---|---|---|---|---|
| OCT. 21... | 2.3 | -- | -- | -- | 483 | 7.9 | 19.0 | 5.6 | 60 |
| DEC. 08... | 27 | -- | -- | -- | 365 | 7.7 | 10.0 | 6.8 | 60 |
| JAN. 19... | 501 | -- | -- | -- | 124 | 7.5 | 5.0 | 7.8 | 61 |
| FEB. 29... | 68 | -- | -- | -- | 226 | 7.5 | 14.0 | 7.2 | 69 |
| MAR. 29... | 64 | 116 | 0 | 95 | 228 | 7.5 | 14.0 | 7.7 | 74 |
| APR. 26... | 139 | 96 | 0 | 79 | 186 | 7.5 | 16.5 | 8.0 | 82 |
| JUNE 07... | 10 | 162 | 0 | 133 | 298 | 7.6 | 27.0 | 5.8 | 72 |
| JULY 19... | 193 | 100 | 0 | 82 | 195 | 7.9 | 28.0 | 5.5 | 70 |
| AUG. 30... | 36 | 160 | 0 | 131 | 292 | 7.6 | 24.0 | 4.1 | 48 |
| SEP. 28... | 210 | 132 | 0 | 108 | 262 | 7.6 | 24.0 | 3.8 | 45 |

## 07078285 WHITE RIVER AT LOCK AND DAM 1, NEAR NADY, ARK.

LOCATION.--Lat 34°01'35", long 91°11'08", in sec.1, T.8 S., R.2 W., Arkansas County, at Lock and Dam 1, 3.4 miles northeast of Nady.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 25 | 7000 | | | | | 170 | | 7 | | |
| NOV. 9 | 8000 | | | | | 147 | | 5 | | |
| NOV. 22 | 7000 | | | | | 158 | | 5 | | |
| DEC. 7 | 6000 | | | | | 164 | | 6 | | |
| DEC. 20 | 40000 | | | 20.0 | 8.2 | 68 | 1K | 2 | 1.000 | 1.100 |
| JAN. 12 | | | | | | 104 | | 3 | | |
| JAN. 24 | | | | | | 106 | | 4 | | |
| FEB. 1 | | | | | | | | 4 | | |
| FEB. 8 | | | | | | 115 | | 6 | | |
| FEB. 21 | | | | | | 124 | | 8 | | |
| MAR. 7 | | | | | | 127 | | 7 | | |
| MAR. 21 | | | | 25.6 | 11.7 | 106 | 1K | 4 | 0.400 | 0.120 |
| APR. 11 | | | | | | 98 | | 7 | | |
| APR. 25 | | | | | | 116 | | 5 | | |
| MAY 10 | | | | | | 88 | | 4 | | |
| MAY 23 | | | | | | 95 | | 3 | | |
| JUNE 14 | | | | | | 111 | | 4 | | |
| JUNE 28 | | | | | | 112 | 10 | 6 | 0.100K | 0.600 |
| JULY 12 | | | | | | 112 | | 6 | | |
| JULY 26 | | | | | | 116 | | 5 | | |
| AUG. 9 | | | | | | 133 | | 5 | | |
| AUG. 23 | | | | | | 134 | | 4 | | |
| SEP. 13 | | | | | | 140 | | 6 | | |
| SEP. 26 | | 570 | 70.0 | 34.0 | | 60 | 8 | 8 | 0.410 | 0.050 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 25 | | | | | | 323 | 8.40 | 21.0 | | 25.0K |
| NOV. 9 | | | | | | 277 | 8.60 | 15.0 | | 25.0K |
| NOV. 22 | | | | | | 227 | 8.50 | 12.0 | | 25.0K |
| DEC. 7 | | | | | | 270 | 8.50 | 9.0 | | 25.0K |
| DEC. 20 | 157 | 80 | 237 | 84 | 50.0 | 133 | 7.80 | | 80 | 150.0 |
| JAN. 12 | | | | | | 166 | 8.00 | 9.0 | | 30.0 |
| JAN. 24 | | | | | | 167 | 8.10 | 11.0 | | 50.0 |
| FEB. 8 | | | | | | 167 | 8.00 | 9.0 | | 25.0K |
| FEB. 21 | | | | | | 270 | 8.30 | 9.0 | | 25.0 |
| MAR. 7 | | | | | | 229 | 6.70 | 12.0 | | 30.0 |
| MAR. 21 | 184 | 165 | 353 | 112 | 64.0 | 181 | 7.70 | 18.0 | 100 | 180.0 |
| APR. 11 | | | | | | 242 | 7.90 | 18.0 | | 55.0 |
| APR. 25 | | | | | | 219 | 7.80 | 20.0 | | 25.0K |
| MAY 10 | | | | | | 153 | 6.80 | 20.0 | | 25.0K |
| MAY 23 | | | | | | 201 | 7.20 | 23.0 | | 25.0K |
| JUNE 14 | | | | | | 220 | 8.20 | 27.0 | | 55.0 |
| JUNE 28 | 149 | 45 | 194 | 130 | 76.0 | 244 | | 28.0 | 30 | 25.0K |
| JULY 12 | | | | | | 217 | | 29.0 | | 85.0 |
| JULY 26 | | | | | | 200 | 7.90 | 28.0 | | 80.0 |
| AUG. 9 | | | | | | 198 | 7.90 | 30.0 | | 23.0 |
| AUG. 23 | | | | | | 265 | 8.50 | 27.0 | | 110.0 |
| SEP. 13 | | | | | | 305 | 8.00 | 27.0 | | 120.0 |
| SEP. 26 | 130 | 56 | 196 | 146 | 86.0 | 275 | 8.30 | | 15 | 25.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 25 | 8.4 | | 1.2 | | | |
| NOV. 9 | 10.6 | | 3.4 | | | |
| NOV. 22 | 10.8 | | 2.8 | | | |
| DEC. 7 | 12.0 | | | | | |
| DEC. 20 | 8.9 | | | 10 | 80 | 207 |
| JAN. 12 | 11.5 | | 1.7 | | | |
| JAN. 24 | 11.5 | | 2.5 | | | |
| FEB. 8 | 12.5 | | 4.8 | | | |
| FEB. 21 | 11.8 | | 11.8L | | | |
| MAR. 7 | 10.5 | | 1.9 | | | |
| MAR. 21 | 8.6 | | 2.7 | 1300 | 36000 | 1500 |
| APR. 11 | 8.8 | | 2.5 | | | |
| APR. 25 | 8.9 | | 3.8 | | | |
| MAY 10 | 5.4 | | 1.8 | | | |
| MAY 23 | 3.8 | | 2.8 | | | |
| JUNE 14 | 8.2 | | 2.8 | | | |
| JUNE 28 | 7.8 | | 2.0 | | | |
| JULY 12 | 7.5 | 96.0 | 1.5 | | | |
| JULY 26 | 8.4 | 106.0 | 2.0 | | | |
| AUG. 9 | 8.1 | 90.0 | 2.4 | | | |
| AUG. 23 | 9.9 | 122.0 | 2.6 | | | |
| SEP. 13 | 7.0 | 86.0 | 1.4 | | | |
| SEP. 26 | 8.4 | | 3.2 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JUNE 28 | | | | | | | | | 32 |
| SEP. 26 | 10K | 2K | 50K | | 3K | 100K | 0.2K | 50K | 5 |

K Less than.
L Greater than.

## 07188820 LITTLE SUGAR CREEK AT CAVERNA, MO.

LOCATION.--Lat 36°30'10", long 94°16'30", in SW¼NE¼ sec.34, T.21 N., R.31 W., McDonald County, at bridge on U.S. Highway 71, 0.5 mile north of Caverna, Mo., and 0.1 mile downstream from Bear Creek.

DRAINAGE AREA.--118 sq mi (at State line).

PERIOD OF RECORD.--Chemical analyses: August 1967 to September 1972.

REMARKS.--Additional analyses furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DIS-CHARGE (CFS) | DIS-SOLVED SILICA (SIO2) (MG/L) | DIS-SOLVED IRON (FE) (UG/L) | DIS-SOLVED MAN-GANESE (MN) (UG/L) | DIS-SOLVED CAL-CIUM (CA) (MG/L) | DIS-SOLVED MAG-NE-SIUM (MG) (MG/L) | DIS-SOLVED SODIUM (NA) (MG/L) | DIS-SOLVED PO-TAS-SIUM (K) (MG/L) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | DIS-SOLVED SULFATE (SO4) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | | |
| 07... | 34 | 8.7 | 20 | 10 | 58 | 2.1 | 7.9 | 2.5 | 168 | 0 | 138 | 13 |
| NOV. | | | | | | | | | | | | |
| 02... | 28 | 7.8 | 160 | 20 | 57 | 2.1 | 8.3 | 2.6 | 184 | 0 | 151 | 5.4 |
| 30... | 22 | 7.3 | 0 | 20 | 58 | 2.0 | 6.9 | 2.0 | 168 | 0 | 138 | 7.6 |
| JAN. | | | | | | | | | | | | |
| 04... | 76 | 6.3 | 0 | 230 | 54 | 1.8 | 4.8 | 3.5 | 160 | 0 | 131 | 15 |
| FEB. | | | | | | | | | | | | |
| 03... | 38 | 4.9 | 10 | 130 | 54 | 1.6 | 6.2 | 2.4 | 156 | 0 | 128 | 10 |
| MAR. | | | | | | | | | | | | |
| 15... | 23 | 5.2 | 10 | 10 | 53 | 1.7 | 6.6 | 1.5 | 156 | 0 | 128 | 8.2 |
| APR. | | | | | | | | | | | | |
| 13... | 32 | 6.3 | 30 | 10 | 53 | 1.8 | 7.8 | 2.2 | 162 | 0 | 133 | 7.6 |
| MAY | | | | | | | | | | | | |
| 03... | 164 | 7.8 | 20 | 20 | 46 | 1.3 | 4.4 | 1.4 | 140 | 0 | 115 | 7.2 |
| JUNE | | | | | | | | | | | | |
| 06... | 26 | 9.8 | 10 | 20 | 54 | 1.8 | 6.5 | 2.5 | 172 | 0 | 141 | 6.1 |
| JULY | | | | | | | | | | | | |
| 13... | 112 | 9.0 | 20 | 10 | 52 | 1.5 | 5.6 | 2.0 | 164 | 0 | 134 | 3.8 |
| AUG. | | | | | | | | | | | | |
| 17... | 12 | 11 | 0 | 0 | 57 | 1.8 | 7.5 | 2.7 | 184 | 0 | 151 | 6.0 |
| SEP. | | | | | | | | | | | | |
| 06... | 12 | 12 | 10 | 20 | 58 | 2.0 | 8.6 | 2.1 | 184 | 0 | 151 | 8.1 |

| DATE | DIS-SOLVED CHLO-RIDE (CL) (MG/L) | DIS-SOLVED FLUO-RIDE (F) (MG/L) | DIS-SOLVED NITRATE (N) (MG/L) | DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L) | ORGANIC NITRO-GEN (N) (MG/L) | TOTAL PHOS-PHORUS (P) (MG/L) | DIS-SOL-VED-PHOS-PHORUS (P) (MG/L) | DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L) | DIS-SOLVED SOLIDS (TONS PER AC-FT) | DIS-SOLVED SOLIDS (TONS PER DAY) | HARD-NESS (CA,MG) (MG/L) | NON-CAR-BONATE HARD-NESS (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | | |
| 07... | 15 | .0 | 1.0 | .00 | .13 | .25 | .23 | 183 | .25 | 16.8 | 150 | 16 |
| NOV. | | | | | | | | | | | | |
| 02... | 11 | .0 | .70 | .00 | .13 | .24 | .22 | 196 | .27 | 14.8 | 150 | 0 |
| 30... | 12 | .0 | 1.1 | .00 | .05 | .27 | .06 | 185 | .25 | 11.0 | 150 | 15 |
| JAN. | | | | | | | | | | | | |
| 04... | 6.5 | .1 | 2.5 | .00 | .00 | .14 | .12 | 182 | .25 | 37.3 | 140 | 11 |
| FEB. | | | | | | | | | | | | |
| 03... | 9.6 | .0 | 2.2 | .05 | .16 | .17 | .16 | 181 | .25 | 18.6 | 140 | 13 |
| MAR. | | | | | | | | | | | | |
| 15... | 10 | .1 | 1.3 | .04 | .05 | .21 | .19 | 175 | .24 | 10.9 | 140 | 11 |
| APR. | | | | | | | | | | | | |
| 13... | 13 | .0 | .56 | .08 | .10 | .25 | .17 | 170 | .23 | 14.7 | 140 | 6 |
| MAY | | | | | | | | | | | | |
| 03... | 7.0 | .0 | .90 | .00 | .11 | .11 | .10 | 150 | .20 | 66.4 | 120 | 6 |
| JUNE | | | | | | | | | | | | |
| 06... | 9.3 | .1 | .50 | .04 | .06 | .16 | .16 | 167 | .23 | 11.7 | 140 | 1 |
| JULY | | | | | | | | | | | | |
| 13... | 7.0 | .0 | 1.2 | .04 | .13 | .21 | .17 | 169 | .23 | 51.1 | 140 | 1 |
| AUG. | | | | | | | | | | | | |
| 17... | 9.0 | .0 | .29 | .00 | .15 | .19 | .13 | 191 | .26 | 6.19 | 150 | 0 |
| SEP. | | | | | | | | | | | | |
| 06... | 11 | .1 | .32 | .00 | .00 | .16 | .15 | 195 | .27 | 6.32 | 150 | 2 |

## 07188820 LITTLE SUGAR CREEK AT CAVERNA, MO.--continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | PERCENT SODIUM | SODIUM AD- SORP- TION RATIO | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) | PH (UNITS) | TEMPER- ATURE (DEG C) | COLOR (PLAT- INUM- COBALT UNITS) | DIS- SOLVED OXYGEN (MG/L) | PER- CENT SATUR- ATION | CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) | FECAL COLI- FORM (COL. PER 100 ML) | STREP- TOCOCCI (COL- ONIES PER 100 ML) | METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | | |
| 07... | 10 | .3 | 360 | 7.8 | 17.0 | 3 | 7.7 | 79 | 4 | 88 | 1600 | .00 |
| NOV. | | | | | | | | | | | | |
| 02... | 10 | .3 | 325 | 7.8 | 16.0 | 5 | 8.6 | 85 | 0 | 42 | 180 | .03 |
| 30... | 9 | .2 | 360 | 7.7 | 8.5 | 5 | 10.2 | 87 | 0 | 10 | 50 | .02 |
| JAN. | | | | | | | | | | | | |
| 04... | 7 | .2 | 285 | 7.9 | 5.0 | 2 | 10.6 | 81 | 0 | 150 | 220 | .04 |
| FEB. | | | | | | | | | | | | |
| 03... | 9 | .2 | 290 | 7.9 | 3.0 | 2 | 13.0 | 96 | 4 | -- | 21 | .03 |
| MAR. | | | | | | | | | | | | |
| 15... | 9 | .2 | 320 | 7.9 | 12.5 | 2 | 8.6 | 80 | 1 | 23 | 51 | .03 |
| APR. | | | | | | | | | | | | |
| 13... | 11 | .3 | 300 | 8.2 | 22.0 | 5 | 10.2 | 116 | 0 | 140 | 100 | .02 |
| MAY | | | | | | | | | | | | |
| 03... | 7 | .2 | 270 | 7.7 | 14.5 | 5 | 9.6 | 91 | 1 | 220 | 290 | .03 |
| JUNE | | | | | | | | | | | | |
| 06... | 9 | .2 | 300 | 8.0 | 26.0 | 5 | 9.1 | 111 | 6 | 1 | 110 | .02 |
| JULY | | | | | | | | | | | | |
| 13... | 8 | .2 | 285 | 7.6 | 21.5 | 10 | 6.4 | 72 | 0 | 660 | 7300 | .04 |
| AUG. | | | | | | | | | | | | |
| 17... | 10 | .3 | 320 | 7.8 | 27.0 | 5 | 8.2 | 102 | 0 | 740 | 620 | .03 |
| SEP. | | | | | | | | | | | | |
| 06... | 11 | .3 | 340 | 7.7 | 22.0 | 5 | 6.8 | 77 | 0 | 30 | 140 | .01 |

| DATE | DIS- SOLVED CAD- MIUM (CD) (UG/L) | DIS- SOLVED CHRO- MIUM (CR) (UG/L) | DIS- SOLVED COBALT (CO) (UG/L) | DIS- SOLVED COPPER (CU) (UG/L) | DIS- SOLVED LEAD (PB) (UG/L) | DIS- SOLVED NICKEL (NI) (UG/L) | DIS- SOLVED SILVER (AG) (UG/L) | DIS- SOLVED ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|---|
| JAN. | | | | | | | | |
| 04... | 2 | 0 | 0 | 300 | 9 | 26 | 3 | 630 |

## 07188820 LITTLE SUGAR CREEK AT CAVERNA, MO.--continued

### ADDITIONAL CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | 53 | | | 56.8 | 6.3 | 146 | 7 | 11 | 0.095 | 3.120 |
| OCT. 19 | | | | | | 124 | | 7 | | |
| OCT. 20 | 0 | | | | | | | | | |
| NOV. 1 | 6 | | | | | 156 | | 12 | | |
| NOV. 15 | 28 | | | | | 129 | | 9 | | |
| DEC. 13 | 145 | | | | | 119 | | 6 | | |
| JAN. 24 | 28 | 100K | 100.0K | 54.4 | 1.4 | 131 | 11 | 2 | 1.100 | 0.900 |
| JAN. 31 | 19 | | | | | 131 | | 9 | | |
| FEB. 14 | 11 | | | | | 130 | | 7 | | |
| MAR. 13 | 19 | | | | | 137 | | 13 | | |
| MAR. 28 | 19 | | | | | 128 | | 10 | | |
| APR. 4 | 2 | | | 56.8 | 1.9 | 128 | 4 | 9 | 1.000 | 0.580 |
| APR. 18 | 74 | | | | | 119 | | 6 | | |
| MAY 1 | 121 | | | | | 109 | | 5 | | |
| MAY 15 | 28 | | | | | 125 | | 6 | | |
| MAY 30 | | | | | | 132 | | 9 | | |
| MAY 31 | 19 | | | | | | | | | |
| JUNE 19 | 2 | | | | | 136 | | 6 | | |
| JULY 4 | 121 | 160 | 60.0 | 47.8 | 2.0 | 82 | 9 | 6 | 10.000 | 1.650 |
| JULY 18 | 28 | | | | | 140 | | 8 | | |
| JULY 31 | 19 | | | | | 142 | | 8 | | |
| AUG. 21 | 0 | | | | | 144 | | 9 | | |
| AUG. 29 | 6 | | | | | 147 | | 10 | | |
| SEP. 18 | 11 | | | | | 108 | | 10 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | 220 | 18 | 238 | 168 | 142.0 | 324 | 8.10 | 19.0 | 0 | 25.0K |
| OCT. 19 | | | | | | 400 | 8.00 | 18.0 | | 25.0K |
| NOV. 1 | | | | | | 294 | 8.10 | 18.0 | | 25.0K |
| NOV. 15 | | | | | | 215 | 8.30 | 16.0 | | 25.0K |
| DEC. 13 | | | | | | 256 | 8.00 | 10.0 | | 25.0K |
| JAN. 24 | 176 | 12 | 188 | 142 | 136.0 | 243 | 8.20 | 10.0 | 5 | 25.0K |
| JAN. 31 | | | | | | 224 | 8.40 | 6.0 | | 25.0K |
| FEB. 14 | | | | | | 273 | 8.20 | 10.0 | | 25.0K |
| MAR. 13 | | | | | | 224 | 8.60 | 10.0 | | 25.0K |
| MAR. 28 | | | | | | 204 | 7.50 | 10.0 | | 25.0K |
| APR. 4 | 163 | 2 | 195 | 150 | 142.0 | 281 | 7.70 | 11.0 | 0 | 25.0K |
| APR. 18 | | | | | | 238 | 7.80 | | | 25.0K |
| MAY 1 | | | | | | 213 | 7.70 | 16.0 | | 25.0K |
| MAY 15 | | | | | | 225 | 7.60 | | | 25.0K |
| MAY 30 | | | | | | 278 | 7.90 | 18.0 | | 25.0K |
| JUNE 19 | | | | | | 278 | 8.20 | 22.0 | | 25.0K |
| JULY 4 | 186 | 93 | 279 | 126 | 115.0 | 227 | 7.10 | 17.0 | 60 | 25.0K |
| JULY 18 | | | | | | 247 | 8.30 | 26.0 | | 25.0K |
| JULY 31 | | | | | | 237 | 7.80 | 23.0 | | 25.0K |
| AUG. 21 | | | | | | 324 | 8.00 | 29.0 | | 9.0 |
| AUG. 29 | | | | | | 307 | 8.00 | 27.0 | | 9.0 |
| SEP. 18 | | | | | | 316 | 7.00 | | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 5 | 9.1 | | 1.5 | | | |
| OCT. 15 | | | | 4K | 4 | 13 |
| OCT. 19 | 10.1 | | 1.2 | | | |
| NOV. 1 | 11.2 | | 2.2 | | | |
| NOV. 15 | 15.3 | | 2.7 | | | |
| DEC. 13 | 10.4 | | 1.2 | | | |
| JAN. 24 | 12.2 | | 2.3 | | | |
| JAN. 25 | | | | 4K | 4K | 80 |
| JAN. 31 | 14.1 | | 2.9 | | | |
| FEB. 14 | 12.5 | | 2.6 | | | |
| MAR. 13 | 10.1 | | 1.3 | | | |
| MAR. 28 | 9.4 | | 0.8 | | | |
| APR. 4 | 11.8 | | 1.8 | | | |
| APR. 18 | 9.6 | | 1.7 | | | |
| MAY 1 | 9.9 | | 1.8 | | | |
| MAY 15 | 10.1 | | 1.9 | | | |
| MAY 30 | 11.4 | | 3.0 | | | |
| JUNE 19 | 7.0 | | 1.2 | | | |
| JULY 4 | 7.9 | 81.0 | 1.3 | 320 | 243 | 248 |
| JULY 18 | 9.9 | 121.0 | 2.7 | | | |
| JULY 31 | 10.0 | 115.0 | 2.2 | | | |
| AUG. 21 | 8.5 | 109.0 | 3.2 | | | |
| AUG. 29 | 8.2 | 101.0 | 1.3 | | | |
| SEP. 18 | 8.9 | | 1.1 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JULY 4 | | 2K | 100K | | 25 | 100K | | 30K | 22 |

K Less than.

## 07188910 BUTLER CREEK NEAR SULPHUR SPRINGS, ARK.

LOCATION.--Lat 36°30'44", long 94°28'54", in NW¼NW¼ sec.35, T.21 N., R.33 W., McDonald County, Mo., at bridge on county road about 500 ft west of State Highway 59, 0.9 mile north of State line along Highway 59, 2.0 miles northwest of Sulphur Springs.

DRAINAGE AREA.--34.9 sq mi (at State line).

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | 0 | | | 54.4 | 9.2 | 152 | 8 | 11 | 0.990 | 0.210 |
| OCT. 19 | | | | | | 146 | | 9 | | |
| NOV. 1 | 8 | | | | | 156 | | 10 | | |
| NOV. 15 | 0 | | | | | 157 | | 12 | | |
| DEC. 13 | 0 | | | | | 142 | | 6 | | |
| JAN. 24 | | 100K | 100.0K | 53.6 | 5.8 | 142 | 6 | 8 | 0.900 | 0.200 |
| JAN. 31 | 1 | | | | | 144 | | 8 | | |
| FEB. 14 | 0 | | | | | 149 | | 7 | | |
| MAR. 13 | 1 | | | | | 147 | | 12 | | |
| MAR. 28 | 1 | | | | | 143 | | 8 | | |
| APR. 4 | 7 | | | 59.2 | 5.3 | 142 | 7 | 9 | 0.500 | 0.180 |
| APR. 18 | 1 | | | | | 136 | | 4 | | |
| MAY 1 | 42 | | | | | 119 | | 5 | | |
| MAY 15 | 0 | | | | | 142 | | 6 | | |
| MAY 30 | | | | | | 143 | | 7 | | |
| MAY 31 | 6 | | | | | | | | | |
| JUNE 19 | 0 | | | | | 139 | | 9 | | |
| JULY 4 | 370 | 160 | 50.0 | 41.6 | 6.3 | 82 | 10 | 5 | 2.600 | 0.350 |
| JULY 18 | 7 | | | | | 145 | | 8 | | |
| JULY 31 | 14 | | | | | 151 | | 6 | | |
| AUG. 21 | 3 | | | | | 141 | | 9 | | |
| AUG. 29 | 7 | | | | | 138 | | 9 | | |
| SEP. 18 | 7 | | | | | 141 | | 10 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | 201 | 3 | 204 | 174 | 136.0 | 335 | 8.20 | 19.0 | 0 | 25.0K |
| OCT. 19 | | | | | | 300 | 8.00 | 18.5 | | 25.0K |
| NOV. 1 | | | | | | 258 | 8.00 | 16.0 | | 25.0K |
| NOV. 15 | | | | | | 283 | 8.20 | 16.0 | | 25.0K |
| DEC. 13 | | | | | | 303 | 8.10 | | | 25.0K |
| JAN. 24 | 188 | 1 | 189 | 158 | 134.0 | 250 | 8.60 | 10.0 | 5 | 25.0K |
| JAN. 31 | | | | | | 246 | 8.50 | 5.0 | | 25.0K |
| FEB. 14 | | | | | | 258 | 8.50 | 11.0 | | 25.0K |
| MAR. 13 | | | | | | 236 | 8.70 | 11.0 | | 25.0K |
| MAR. 28 | | | | | | 238 | 7.90 | 9.0 | | 25.0K |
| APR. 4 | 211 | 7 | 218 | 170 | 148.0 | 303 | 8.30 | 12.0 | 0 | 25.0K |
| APR. 18 | | | | | | 270 | 8.00 | | | 25.0K |
| MAY 1 | | | | | | 222 | 8.00 | 17.0 | | 25.0K |
| MAY 15 | | | | | | 267 | 7.80 | | | 25.0K |
| MAY 30 | | | | | | 295 | 7.80 | 20.0 | | 25.0K |
| JUNE 19 | | | | | | 287 | 8.20 | 23.0 | | 25.0K |
| JULY 4 | 182 | 60 | 242 | 130 | 104.0 | 233 | 7.00 | 14.0 | 30 | 25.0K |
| JULY 18 | | | | | | 253 | 8.40 | 26.0 | | 25.0K |
| JULY 31 | | | | | | 249 | 7.80 | 22.0 | | 25.0K |
| AUG. 21 | | | | | | 305 | 8.10 | 29.0 | | 6.0 |
| AUG. 29 | | | | | | 266 | 8.10 | 22.0 | | 6.0 |
| SEP. 18 | | | | | | 286 | 7.90 | 24.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 5 | 9.9 | | 1.6 | | | |
| OCT. 15 | | | | 4K | 4K | 5 |
| OCT. 19 | 8.5 | | 2.6 | | | |
| NOV. 1 | 10.4 | | 1.4 | | | |
| NOV. 15 | 10.9 | | 2.1 | | | |
| DEC. 13 | 11.0 | | 1.5 | | | |
| JAN. 24 | 14.0 | | 2.2 | | | |
| JAN. 25 | | | | 4K | 4K | 12 |
| JAN. 31 | 15.2 | | 3.5 | | | |
| FEB. 14 | 13.9 | | 4.4 | | | |
| MAR. 13 | 9.7 | | 0.6 | | | |
| MAR. 28 | 9.5 | | 1.6 | | | |
| APR. 4 | 11.9 | | 1.7 | 4K | 4K | 4 |
| APR. 18 | 10.0 | | 2.0 | | | |
| MAY 1 | 10.1 | | 2.2 | | | |
| MAY 15 | 10.3 | | 2.0 | | | |
| MAY 30 | 9.3 | | 0.9 | | | |
| JUNE 19 | 6.5 | | 0.5 | | | |
| JULY 4 | 9.1 | 88.0 | 0.8 | 264 | 547 | 384 |
| JULY 18 | 9.0 | 110.0 | 1.2 | | | |
| JULY 31 | 8.7 | 95.0 | 1.2 | | | |
| AUG. 21 | 8.8 | 104.0 | 3.5 | | | |
| AUG. 29 | 9.5 | 108.0 | 2.3 | | | |
| SEP. 18 | 8.1 | 95.0 | 1.8 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JULY 4 | | 2K | 200K | | 60 | 100K | | 50 | 71 |
| SEP. 18 | | | | | | | | | |

K Less than.

## 07191220 SPAVINAW CREEK NEAR SYCAMORE, OKLA.

LOCATION.--Lat 36°19'57", long 94°38'24", in NE¼NW¼ sec.4, T.21 N., R.25 E., Delaware County, at gaging station on right bank 1.8 miles upstream from Cherokee Creek, 4.8 miles northeast of Row, 6.5 miles southeast of Sycamore, and at mile 35.0.

DRAINAGE AREA.--133 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1971 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| NOV. 15 | 18 | | | | | 126 | | 11 | | |
| DEC. 13 | 172 | | | | | 110 | | 15 | | |
| JAN. 24 | 36 | | | | | 106 | | 8 | | |
| JAN. 31 | 33 | | | | | 112 | | 10 | | |
| FEB. 14 | 38 | | | | | 110 | | 10 | | |
| MAR. 13 | 27 | | | | | 108 | | 12 | | |
| MAR. 28 | 27 | | | 49.6 | 2.4 | 110 | 4 | 12 | 1.200 | 0.230 |
| APR. 4 | 25 | | | | | 104 | | 12 | | |
| APR. 18 | 39 | | | 48.0 | 0.5 | 114 | 6 | 9 | 0.600 | 0.060 |
| MAY 1 | 127 | | | | | 92 | | 6 | | |
| MAY 15 | 53 | | | | | 101 | | 7 | | |
| MAY 30 | 22 | | | 45.0 | 3.0 | 111 | 4 | 8 | 1.900 | 0.190 |
| JUNE 19 | 13 | | | | | 115 | | 10 | | |
| JULY 4 | 512 | | | | | 86 | | | | |
| JULY 18 | -- | 50K | 50.0K | 48.0 | 2.0 | 101 | 1K | 8 | 3.900 | 0.010 |
| JULY 31 | -- | | | | | 120 | | 8 | | |
| AUG. 21 | 17 | | | | | 128 | | 9 | | |
| AUG. 29 | 21 | | | | | 124 | | 9 | | |
| SEP. 18 | 15 | | | | | 125 | | 11 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| NOV. 15 | | | | | | 222 | 7.70 | 17.0 | | 25.0K |
| DEC. 13 | | | | | | 227 | 7.70 | 11.0 | | 25.0K |
| JAN. 24 | | | | | | 200 | 7.80 | 9.0 | | 25.0K |
| JAN. 31 | | | | | | 210 | 7.90 | 9.0 | | 25.0K |
| FEB. 14 | | | | | | 243 | 7.90 | 13.0 | | 25.0K |
| MAR. 13 | | | | | | 204 | 8.10 | 10.0 | | 25.0K |
| MAR. 28 | 145 | 38 | 183 | 134 | 124.0 | 190 | 6.80 | 9.0 | 0 | 25.0K |
| APR. 4 | | | | | | 263 | 8.10 | 14.0 | | 25.0K |
| APR. 18 | 165 | 22 | 187 | 122 | 120.0 | 243 | 7.70 | 18.0 | 0 | 25.0K |
| MAY 1 | | | | | | 185 | 7.40 | 14.0 | | 25.0K |
| MAY 15 | | | | | | 192 | 7.50 | | | 25.0K |
| MAY 30 | 156 | 10 | 166 | 126 | 112.0 | 244 | 7.40 | 14.0 | 5 | 25.0K |
| JUNE 19 | | | | | | 260 | 7.60 | 18.0 | | 25.0K |
| JULY 4 | | | | | | 200 | 7.50 | 13.0 | | 25.0K |
| JULY 18 | | | | 130 | 122.0 | 211 | 7.20 | 20.0 | 10 | 25.0K |
| JULY 31 | | | | | | 210 | 7.60 | 18.0 | | 25.0K |
| AUG. 21 | | | | | | 284 | 7.80 | 22.0 | | 8.0 |
| AUG. 29 | | | | | | 262 | 7.80 | 19.0 | | 9.0 |
| SEP. 18 | | | | | | 246 | 7.70 | 18.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| NOV. 15 | 10.3 | | 1.8 | | | |
| DEC. 13 | 10.0 | | 0.4 | | | |
| JAN. 24 | 11.3 | | 1.8 | | | |
| JAN. 31 | 12.2 | | 1.7 | | | |
| FEB. 14 | 11.5 | | 2.0 | | | |
| MAR. 13 | 10.8 | | 1.2 | | | |
| MAR. 28 | 10.4 | | 1.0 | 28 | 540 | 3 |
| APR. 4 | 11.4 | | 2.8 | | | |
| APR. 18 | 10.3 | | 1.8 | 1020 | 250 | 84 |
| MAY 1 | 9.0 | | 1.4 | | | |
| MAY 15 | 11.0 | | 2.1 | | | |
| MAY 30 | 9.9 | | 1.5 | | | |
| JUNE 19 | 9.0 | | 2.1 | | | |
| JULY 4 | 5.2 | 49.0 | 0.9 | | | |
| JULY 18 | 9.4 | 102.0 | 1.8 | | | |
| JULY 31 | 9.0 | 95.0 | 0.4 | | | |
| AUG. 21 | 9.3 | | 2.2 | | | |
| AUG. 29 | 9.7 | | 1.5 | | | |
| SEP. 18 | 8.9 | | 0.9 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JULY 18 | | 2K | 100K | | 10K | 80K | 0.1K | 50K | 2 |

K Less than.

### 07195430 ILLINOIS RIVER SOUTH OF SILOAM SPRINGS, ARK.

LOCATION.--Lat 36°06'31", long 94°32'00", in SE¼NE¼ sec.31, T.17 N., R.33 W., Benton County, at bridge on State Highway 59, 5.0 miles south of Siloam Springs.

DRAINAGE AREA.--575 sq mi (at State line).

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | 370 | | | | | 91 | | 8 | | |
| OCT. 20 | 120 | 50 | 100.0K | 44.0 | 3.4 | 119 | 6 | 8 | 1.600 | |
| NOV. 1 | 130 | | | | | 120 | | 11 | | |
| NOV. 15 | 100 | | | | | 125 | | 11 | | |
| DEC. 13 | 1300 | | | | | 69 | | 6 | | |
| JAN. 24 | | | | | | 162 | | 11 | | |
| JAN. 25 | 170 | | | | | | | | | |
| JAN. 31 | 170 | | | | | 105 | | 7 | | |
| FEB. 14 | 840 | | | | | 89 | | 8 | | |
| MAR. 13 | 120 | | | | | 106 | | 11 | | |
| MAR. 28 | 150 | | | 44.0 | 1.9 | 105 | 8 | 12 | 1.300 | 0.470 |
| APR. 4 | 130 | | | | | 100 | | 9 | | |
| APR. 18 | 600 | | | 35.2 | 2.9 | 91 | 11 | 7 | 0.900 | 0.290 |
| MAY 1 | 2900 | | | | | 39 | | 3 | | |
| MAY 15 | 310 | | | | | 50 | | 8 | | |
| MAY 30 | | | | 43.0 | 3.0 | 85 | 8 | 9 | 0.800 | 0.270 |
| MAY 31 | 160 | | | | | | | | | |
| JUNE 19 | 97 | | | | | 106 | | 10 | | |
| JULY 4 | 930 | | | | | 76 | | 6 | | |
| JULY 18 | 550 | 150 | 50.0K | 30.0 | 1.0 | 93 | 6 | 8 | 1.200 | 0.150 |
| JULY 31 | 140 | | | | | 110 | | 6 | | |
| AUG. 21 | 71 | | | | | 115 | | 11 | | |
| AUG. 29 | 72 | | | | | 115 | | 10 | | |
| SEP. 18 | 65 | | | | | 115 | | 12 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | | | | | | 240 | 7.00 | 17.0 | | 25.0K |
| OCT. 20 | 160 | 0 | 176 | 124 | 110.0 | 254 | 7.00 | 18.0 | 5 | 25.0K |
| NOV. 1 | | | | | | 230 | 7.00 | 16.0 | | 25.0K |
| NOV. 15 | | | | | | 233 | 8.20 | 15.0 | | 25.0K |
| DEC. 13 | | | | | | 170 | 7.40 | 9.0 | | 25.0K |
| JAN. 24 | | | | | | 185 | 8.20 | 8.0 | | 25.0K |
| JAN. 31 | | | | | | 208 | 7.80 | 3.0 | | 25.0K |
| FEB. 14 | | | | | | 212 | 8.10 | 10.0 | | 25.0K |
| MAR. 13 | | | | | | 208 | 7.70 | 12.0 | | 25.0K |
| MAR. 28 | 166 | 17 | 181 | 118 | 110.0 | 181 | 7.20 | 10.0 | 0 | 25.0K |
| APR. 4 | | | | | | 256 | 8.20 | 14.0 | | 25.0K |
| APR. 18 | 132 | 32 | 164 | 103 | 88.0 | 185 | 7.80 | | 15 | 25.0K |
| MAY 1 | | | | | | 83 | 6.90 | 15.0 | | 600.0 |
| MAY 15 | | | | | | 187 | 7.50 | | | 25.0K |
| MAY 30 | 195 | 11 | 206 | 120 | 100.0 | 250 | 6.90 | 17.0 | 20 | 25.0K |
| JUNE 19 | | | | | | 253 | 8.10 | 26.0 | | 25.0K |
| JULY 4 | | | | | | 165 | 7.80 | 19.0 | | 75.0 |
| JULY 18 | 141 | 33 | 174 | 102 | 96.0 | 196 | 7.70 | 27.0 | 20 | 25.0K |
| JULY 31 | | | | | | 203 | 7.60 | 21.0 | | 25.0K |
| AUG. 21 | | | | | | 258 | 8.10 | 30.0 | | 13.0 |
| AUG. 29 | | | | | | 275 | 8.10 | 26.0 | | 13.0 |
| SEP. 18 | | | | | | 265 | 7.80 | 23.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 5 | 6.3 | | 0.5 | | | |
| OCT. 20 | 6.9 | | 1.7 | 460 | 1300 | 330 |
| NOV. 1 | 7.3 | | 0.7 | | | |
| NOV. 15 | 11.5 | | 3.6 | | | |
| DEC. 13 | 10.0 | | 2.1 | | | |
| JAN. 24 | 12.5 | | 1.0 | | | |
| JAN. 31 | 12.5 | | | | | |
| FEB. 14 | 12.5 | | 3.0 | | | |
| MAR. 13 | 7.6 | | 0.5 | | | |
| MAR. 28 | 8.3 | | 2.5 | 10 | 600 | 27 |
| APR. 4 | 11.8 | | 2.3 | | | |
| APR. 18 | 8.6 | | 1.9 | 145 | 640 | 132 |
| MAY 1 | 8.4 | | 4.0 | | | |
| MAY 15 | 9.3 | | 1.0 | | | |
| MAY 30 | 6.7 | | 0.7 | | | |
| JUNE 19 | 7.0 | | 1.6 | | | |
| JULY 4 | 7.2 | 76.0 | 0.8 | | | |
| JULY 18 | 7.8 | 56.0 | 1.0 | | | |
| JULY 31 | 6.6 | 71.0 | 0.4 | | | |
| AUG. 21 | 8.4 | 111.0 | 2.0 | | | |
| AUG. 29 | 8.4 | 102.0 | 1.9 | | | |
| SEP. 18 | 6.6 | 78.0 | 2.0 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JULY 18 | | 2 | 100K | | 50 | 60K | 0.1K | 50K | 43 |
| SEP. 18 | | | | | | | | | |

K Less than.

## 07195850 FLINT CREEK NORTH OF SILOAM SPRINGS, ARK.

LOCATION.--Lat 36°13'53", long 94°33'20" (revised), in NE¼SE¼ sec.23, T.18 N., R.34 W., Benton County, at bridge on State Highway 43, upstream from confluence with Little Flint Creek, 3.0 miles northwest of Siloam Springs.

DRAINAGE AREA.--34.0 sq mi (above Little Flint Creek).

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGANESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | 10 | | | | | 90 | | 8 | | |
| OCT. 19 | | 50K | 40.0K | 35.0 | 2.4 | 52 | | | | |
| OCT. 20 | 31 | | | | | | | | | |
| NOV. 1 | 12 | | | | | 56 | | 7 | | |
| NOV. 15 | 5 | | | | | 90 | | 7 | | |
| DEC. 13 | | | | | | 67 | | 6 | | |
| JAN. 24 | 6 | | | | | 81 | | 6 | | |
| JAN. 31 | 6 | | | | | 83 | | 6 | | |
| FEB. 14 | 31 | | | | | 81 | | 6 | | |
| MAR. 13 | 6 | | | | | 80 | | 7 | | |
| MAR. 28 | 12 | | | 32.0 | 3.9 | 88 | 2 | 7 | 0.500 | 0.120 |
| APR. 4 | 3 | | | | | 75 | | 7 | | |
| APR. 18 | 9 | | | 20.3 | 1.7 | 68 | 3 | 6 | 0.100 | 0.120 |
| MAY 1 | | | | | | 53 | | 5 | | |
| MAY 15 | 21 | | | | | 70 | | 6 | | |
| MAY 30 | | | | 34.0 | 3.0 | 61 | 5 | 7 | 4.400 | 0.480 |
| MAY 31 | 5 | | | | | | | | | |
| JUNE 19 | 2 | | | | | 63 | | 10 | | |
| JULY 4 | 8 | | | | | 51 | | 6 | | |
| JULY 18 | 6 | 120 | 50.0K | 36.0 | 3.0 | 56 | 16 | 5 | 1.900 | 0.010 |
| JULY 31 | 6 | | | | | 91 | | 7 | | |
| AUG. 21 | 2 | | | | | 87 | | 7 | | |
| AUG. 29 | 5 | | | | | 81 | | 7 | | |
| SEP. 18 | 5 | | | | | 81 | | 8 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT VOLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | | | | | | 215 | 8.00 | 19.0 | | 25.0K |
| OCT. 19 | | | 124 | 90 | 80.0 | 200 | 7.90 | 17.5 | 0 | 25.0K |
| NOV. 1 | | | | | | 184 | 7.80 | 17.0 | | 25.0K |
| NOV. 15 | | | | | | 163 | 7.90 | 15.0 | | 25.0K |
| DEC. 13 | | | | | | 169 | 7.70 | 8.0 | | 25.0K |
| JAN. 24 | | | | | | 142 | 8.60 | 11.0 | | 25.0K |
| JAN. 31 | | | | | | 173 | 7.90 | 4.0 | | 25.0K |
| FEB. 14 | | | | | | 178 | 8.60 | 10.0 | | 25.0K |
| MAR. 13 | | | | | | 152 | 7.90 | 11.0 | | 25.0K |
| MAR. 28 | 96 | 3 | 99 | 96 | 80.0 | 117 | 7.30 | 10.0 | 0 | 25.0K |
| APR. 4 | | | | | | 156 | 8.20 | 15.0 | | 25.0K |
| APR. 18 | 91 | 36 | 127 | 76 | 70.0 | 130 | 7.90 | 20.5 | 0 | 25.0K |
| MAY 1 | | | | | | 110 | 7.30 | 15.0 | | 60.0 |
| MAY 15 | | | | | | 165 | 7.20 | | | 25.0K |
| MAY 30 | 167 | 9 | 176 | 102 | 90.0 | 204 | 8.60 | 19.0 | 10 | 25.0K |
| JUNE 19 | | | | | | 165 | 8.10 | 25.0 | | 25.0K |
| JULY 4 | | | | | | 194 | 7.90 | 16.0 | | 25.0K |
| JULY 18 | 132 | 10 | 142 | 102 | 90.0 | 167 | 7.20 | 28.0 | 10 | 25.0K |
| JULY 31 | | | | | | 152 | 7.70 | 23.0 | | 25.0K |
| AUG. 21 | | | | | | 183 | 7.90 | 29.0 | | 7.0 |
| AUG. 29 | | | | | | 185 | 7.80 | 23.0 | | 7.0 |
| SEP. 18 | | | | | | 172 | 7.70 | 24.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 5 | 8.4 | | 0.9 | | | |
| OCT. 19 | 7.7 | | 0.8 | | | |
| OCT. 20 | | | | 100 | 1200 | 1200 |
| NOV. 1 | 8.6 | | 0.8 | | | |
| NOV. 15 | 10.1 | | 1.0 | | | |
| DEC. 13 | 10.6 | | 2.0 | | | |
| JAN. 24 | 12.4 | | 2.2 | | | |
| FEB. 14 | 13.0 | | 2.2 | | | |
| MAR. 13 | 8.7 | | 0.7 | | | |
| MAR. 28 | 8.9 | | 0.7 | 0 | 90 | 10 |
| APR. 4 | 10.3 | | 1.4 | | | |
| APR. 18 | 9.0 | | 1.8 | 12 | 140 | 100 |
| MAY 1 | 8.3 | | 3.9 | | | |
| MAY 15 | 9.6 | | 2.8 | | | |
| MAY 30 | 7.5 | | 0.4 | | | |
| JUNE 19 | 7.0 | | 1.3 | | | |
| JULY 4 | 6.7 | 67.0 | 0.8 | | | |
| JULY 18 | 8.0 | 101.0 | 1.3 | | | |
| JULY 31 | 7.3 | 86.0 | 0.5 | | | |
| AUG. 21 | 7.2 | 92.0 | 1.0 | | | |
| AUG. 29 | 7.3 | 86.0 | 0.9 | | | |
| SEP. 18 | 7.2 | 85.0 | 1.3 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JULY 18 | | 2K | 100K | | 50 | 80K | 0.1K | 50K | 92 |
| SEP. 18 | | | | | | | | | |

K Less than.

## 07195860 SAGER CREEK NEAR SILOAM SPRINGS, ARK.

LOCATION.--Lat 36°11'50", long 94°35'00" in SE¼NE¼ sec.28, T.20 N., R.25 E., Delaware County, Okla., at bridge on county road 0.8 mile west of State line, 2.6 miles northwest of Siloam Springs.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | 3 | | | | | 112 | | 19 | | |
| OCT. 19 | | 50K | 30.0K | 46.0 | 6.3 | 140 | 14 | 25 | 1.900 | |
| OCT. 20 | 8 | | | | | | | | | |
| NOV. 1 | 10 | | | | | 135 | | 22 | | |
| NOV. 15 | 7 | | | | | 174 | | 26 | | |
| DEC. 13 | 1 | | | | | 82 | | 8 | | |
| JAN. 24 | | | | | | 100 | | 16 | | |
| JAN. 31 | 2 | | | | | 100 | | 14 | | |
| FEB. 14 | | | | | | 102 | | 13 | | |
| MAR. 13 | | | | | | 110 | | 21 | | |
| MAR. 28 | | | | 40.0 | 4.9 | 113 | 9 | 26 | 3.000 | 0.410 |
| APR. 4 | 6 | | | | | 100 | | 30 | | |
| APR. 18 | | | | 41.6 | 4.9 | 116 | 12 | 17 | 0.800 | 0.340 |
| MAY 1 | | | | | | 30 | | 4 | | |
| MAY 15 | | | | | | 102 | | 14 | | |
| MAY 30 | | | | 43.0 | 3.0 | 109 | 8 | 16 | 2.000 | 1.090 |
| JUNE 19 | | | | | | 116 | | 19 | | |
| JULY 4 | | | | | | 100 | | 22 | | |
| JULY 18 | | 300 | 50.0K | 42.0 | 3.0 | 96 | 15 | 18 | 6.500 | 1.040 |
| JULY 31 | | | | | | 123 | | 17 | | |
| AUG. 21 | | | | | | 120 | | 31 | | |
| AUG. 29 | | | | | | 127 | | 36 | | |
| SEP. 18 | | | | | | 131 | | 29 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE FIX VOLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | | | | | | 363 | 7.50 | 17.0 | | 25.0K |
| OCT. 19 | 243 | 21 | 270 | 186 | 110.0 | 500 | 7.60 | 17.0 | 10 | 25.0K |
| NOV. 1 | | | | | | 305 | 7.50 | 24.0 | | 25.0K |
| NOV. 15 | | | | | | 320 | 7.00 | 17.0 | | 25.0K |
| DEC. 13 | | | | | | 212 | 7.40 | 9.0 | | 25.0K |
| JAN. 24 | | | | | | 243 | 7.00 | 11.0 | | 25.0K |
| JAN. 31 | | | | | | 217 | 7.60 | 6.0 | | 25.0K |
| FEB. 14 | | | | | | 205 | 7.90 | | | 25.0K |
| MAR. 13 | | | | | | 232 | 7.70 | 12.0 | | 25.0K |
| MAR. 28 | 214 | 3 | 217 | 120 | 100.0 | 290 | 7.10 | 10.0 | 0 | 25.0K |
| APR. 4 | | | | | | 304 | 8.20 | 14.0 | | 25.0K |
| APR. 18 | 62 | 6 | 66 | 96 | 20.0 | 201 | 8.00 | 20.0 | 0.5 | 25.0K |
| MAY 1 | | | | | | 126 | 6.90 | 14.0 | | 220.0 |
| MAY 15 | | | | | | 241 | 7.60 | | | 25.0K |
| MAY 30 | 193 | 10 | 203 | 122 | 100.0 | 263 | 7.30 | 16.0 | 15 | 25.0K |
| JUNE 19 | | | | | | 313 | 8.20 | 23.0 | | 25.0K |
| JULY 4 | | | | | | 256 | 7.70 | 18.0 | | 25.0K |
| JULY 18 | 203 | 20 | 220 | 118 | 104.0 | 250 | 7.40 | 25.0 | 20 | 25.0K |
| JULY 31 | | | | | | 290 | 7.60 | 18.0 | | 25.0K |
| AUG. 21 | | | | | | 202 | 8.00 | 20.5 | | 0.0 |
| AUG. 29 | | | | | | 359 | 8.10 | 24.0 | | 0.0 |
| SEP. 18 | | | | | | 375 | 7.60 | 20.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MPN-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 5 | 7.1 | | 2.3 | | | |
| OCT. 19 | 6.4 | | 3.0 | 450 | 3500 | 1100 |
| OCT. 20 | | | | | | |
| NOV. 1 | 6.8 | | 2.6 | | | |
| NOV. 15 | 9.0 | | 0.4 | | | |
| DEC. 13 | 9.1 | | 3.3 | | | |
| JAN. 24 | 10.9 | | 5.7 | | | |
| JAN. 31 | 10.3 | | | | | |
| FEB. 14 | 11.3 | | 0.5 | | | |
| MAR. 13 | 6.3 | | 4.4 | | | |
| MAR. 28 | 7.5 | | 4.0 | 300 | 90 | 55 |
| APR. 4 | 13.4 | | 3.0 | | | |
| APR. 18 | 11.6 | | 4.6 | 370 | 3000 | 400 |
| MAY 1 | 8.0 | | 0.0K | | | |
| MAY 15 | 11.6 | | 5.6 | | | |
| MAY 30 | 8.5 | | 1.9 | | | |
| JUNE 19 | 9.2 | | 2.9 | | | |
| JULY 4 | 6.1 | 64.0 | 1.0 | | | |
| JULY 18 | 9.0 | 107.0 | 3.0 | | | |
| JULY 31 | 8.0 | 84.0 | 2.7 | | | |
| AUG. 21 | 8.6 | 100.0 | 1.0 | | | |
| AUG. 29 | 10.8 | 127.0 | 4.1 | | | |
| SEP. 18 | 6.3 | 77.0 | 2.4 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JULY 18 | | 2K | 100K | | 25 | 60K | 0.1K | 50K | 24 |
| SEP. 18 | | | | | | | | | |

K Less than.

## 07196900 BARON FORK AT DUTCH MILLS, ARK.

LOCATION.--Lat 35°52'48", long 94°29'11", on line between secs.21 and 22, T.14 N., R.33 W., Washington County, at gaging station, near right bank on downstream side of bridge on State Highway 59 at Dutch Mills, 2.2 miles downstream from Fly Creek, and 2.9 miles upstream from Arkansas-Oklahoma State line.

DRAINAGE AREA.--46.0 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1960 to September 1961, October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | 5 | | | | | 132 | | 7 | | |
| OCT. 20 | 2 | 50K | 30.0K | 46.4 | 6.8 | 134 | 10 | 6 | 0.400 | |
| NOV. 1 | 2 | | | | | 143 | | 6 | | |
| NOV. 15 | 7 | | | | | 149 | | 7 | | |
| DEC. 13 | 60 | | | | | 54 | | 6 | | |
| JAN. 24 | | | | | | 120 | | 7 | | |
| JAN. 25 | 8 | | | | | | | | | |
| JAN. 31 | 8 | | | | | 124 | | 7 | | |
| FEB. 14 | 36 | | | | | 55 | | 5 | | |
| MAR. 13 | 7 | | | | | 128 | | 8 | | |
| MAR. 28 | 12 | | | 50.4 | 4.4 | 124 | 15 | 7 | 0.300 | C.470 |
| APR. 4 | 7 | | | | | 116 | | 6 | | |
| APR. 18 | 17 | | | 44.8 | 4.4 | 112 | 12 | 5 | 0.100 | C.430 |
| MAY 1 | 1250 | | | | | 41 | | 3 | | |
| MAY 15 | 9 | | | | | 118 | | 5 | | |
| MAY 30 | | | | 50.0 | 5.0 | 91 | 11 | 7 | 10.500 | C.700 |
| MAY 31 | 4 | | | | | | | | | |
| JUNE 19 | 2 | | | | | 121 | | 6 | | |
| JULY 4 | 57 | | | | | 103 | | 7 | | |
| JULY 18 | 36 | 80 | 50.0K | 50.0 | 3.C | 117 | 13 | 6 | 5.700 | C.050 |
| JULY 31 | 5 | | | | | 126 | | 5 | | |
| AUG. 21 | 3 | | | | | 125 | | 6 | | |
| AUG. 29 | 2 | | | | | 129 | | 6 | | |
| SEP. 18 | 1 | | | | | 125 | | 5 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | | | | | | 338 | 7.90 | 16.0 | | 25.0K |
| OCT. 20 | | | 178 | 144 | 116.0 | 333 | 8.00 | 19.0 | 5 | 25.0K |
| NOV. 1 | | | | | | 270 | 7.70 | 16.0 | | 25.0K |
| NOV. 15 | | | | | | 253 | 7.90 | 4.5 | | 25.0K |
| DEC. 13 | | | | | | 232 | 7.80 | 7.0 | | 25.0K |
| JAN. 24 | | | | | | 217 | 8.30 | 9.0 | | 25.0K |
| JAN. 31 | | | | | | 238 | 8.00 | 2.0 | | 25.0K |
| FEB. 14 | | | | | | 222 | 8.80 | 13.0 | | 25.0K |
| MAR. 13 | | | | | | 232 | 8.10 | 12.0 | | 25.0K |
| MAR. 28 | 162 | 8 | 170 | 144 | 126.0 | 200 | 7.80 | 11.0 | 0 | 25.0K |
| APR. 4 | | | | | | 277 | 8.30 | 14.0 | | 25.0K |
| APR. 18 | 151 | 24 | 175 | 130 | 112.0 | 222 | 8.70 | | 5 | 25.0K |
| MAY 1 | | | | | | 88 | 7.20 | 14.0 | | 450.0 |
| MAY 15 | | | | | | 238 | 7.80 | | | 25.0K |
| MAY 30 | 213 | 28 | 241 | 146 | 126.0 | 290 | 6.60 | 18.0 | 15 | 25.0K |
| JUNE 19 | | | | | | 263 | 8.20 | 27.0 | | 25.0K |
| JULY 4 | | | | | | 244 | 8.10 | 18.0 | | 25.0K |
| JULY 18 | 180 | 12 | 192 | 138 | 124.C | 244 | 8.00 | 29.0 | 10 | 25.0K |
| JULY 31 | | | | | | 211 | 7.90 | 22.0 | | 25.0K |
| AUG. 21 | | | | | | 285 | 8.00 | 31.5 | | 10.0 |
| AUG. 29 | | | | | | 231 | 8.CC | 26.0 | | 9.0 |
| SEP. 18 | | | | | | 253 | 7.80 | 24.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 5 | 7.3 | | C.6 | | | |
| OCT. 20 | 9.5 | | 3.1 | 120 | 1500 | 900 |
| NOV. 1 | 7.7 | | 1.5 | | | |
| NOV. 15 | 9.1 | | C.8 | | | |
| DEC. 13 | 11.1 | | 1.5 | | | |
| JAN. 24 | 12.8 | | 2.2 | | | |
| JAN. 31 | 12.2 | | 2.0 | | | |
| FEB. 14 | 14.1 | | 3.6 | | | |
| MAR. 13 | 9.3 | | 1.9 | | | |
| MAR. 28 | 9.8 | | C.9 | 70 | 105 | 32 |
| APR. 4 | 13.0 | | 3.3 | | | |
| APR. 18 | 13.3 | | 2.8 | 4 | 5 | 28 |
| MAY 1 | 8.5 | | 7.5 | | | |
| MAY 15 | 11.1 | | 2.8 | | | |
| MAY 30 | 6.0 | | 0.7 | | | |
| JUNE 19 | 7.1 | | 3.5 | | | |
| JULY 4 | 8.4 | 98.0 | 0.9 | | | |
| JULY 18 | 10.6 | 134.0 | 2.5 | | | |
| JULY 31 | 6.3 | 72.0 | 0.6 | | | |
| AUG. 21 | 9.9 | 133.0 | 5.6 | | | |
| AUG. 29 | 9.6 | 117.0 | 3.1 | | | |
| SEP. 18 | 6.7 | 79.0 | 1.3 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JULY 18 | | 2K | 100K | | 50 | 80K | 0.1K | 50K | 22 |
| SEP. 18 | | | | | | | | | |

K Less than.

## 07247012 POTEAU RIVER SOUTH OF BATES, ARK.

LOCATION.--Lat 34°53'44", long 94°23'35", in SW¼NW¼ sec.27, T.3 N., R.32 W., Scott County, at bridge on county road, 0.9 mile south of Bates.

DRAINAGE AREA.--251 sq mi (station 07247010 near Bates).

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 28 | 83 | | | | | 21 | | 2 | | |
| NOV. 8 | 10 | | | | | 21 | | 2 | | |
| NOV. 17 | 2 | | | | | 23 | | 3 | | |
| DEC. 7 | 1510 | 2700 | 100.0K | 6.4 | 1.4 | 12 | | 5 | 0.100K | 0.500 |
| DEC. 21 | 723 | | | | | 6 | | 2 | | |
| JAN. 10 | 244 | | | | | | | 5 | | |
| JAN. 26 | 46 | | | | | 20 | | 5 | | |
| FEB. 16 | 77 | | | | | 15 | | 5 | | |
| MAR. 7 | 30 | | | 4.8 | 5.3 | 19 | 14 | 6 | | 0.450 |
| APR. 12 | 22 | | | | | 21 | | 8 | | |
| MAY 8 | 58 | | | | | 18 | | 4 | | |
| MAY 15 | 21 | | | | | | | | | |
| MAY 16 | 17 | | | | | | | | | |
| MAY 17 | 14 | | | | | 18 | | 3 | | |
| JUNE 12 | 1 | | | | | | | | | |
| JUNE 13 | 1 | 700 | 330.0 | 9.6 | 1.5 | 28 | 12 | 3 | 0.200 | 0.370 |
| JULY 10 | 5 | | | | | 30 | | 7 | | |
| JULY 24 | 2 | | | | | 34 | | 7 | | |
| AUG. 7 | 1 | | | | | 40 | | 6 | | |
| AUG. 14 | 2 | | | | | 37 | | 8 | | |
| SEP. 18 | 188 | | | | | 36 | | 7 | | |
| SEP. 25 | 18 | 950 | 230.0 | 6.0 | | 15 | 9 | 8 | 0.500 | 0.050 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 28 | | | | | | 35 | 6.80 | 19.0 | | 75.0 |
| NOV. 8 | | | | | | 50 | 6.80 | 10.0 | | 25.0K |
| NOV. 17 | | | | | | 57 | 6.90 | 16.0 | | 25.0K |
| DEC. 7 | 183 | 245 | 428 | 22 | 16.0 | 45 | 6.90 | 10.0 | 320 | 320.0 |
| DEC. 21 | | | | | | 26 | 6.50 | 10.0 | | 25.0 |
| JAN. 10 | | | | | | 43 | 6.80 | 9.0 | | |
| JAN. 26 | | | | | | 78 | 6.90 | 9.0 | | 30.0 |
| FEB. 16 | | | | | | 66 | 6.70 | 11.0 | | 25.0K |
| MAR. 7 | 74 | 13 | 87 | 34 | 12.0 | 70 | 7.00 | 14.0 | 20 | 25.0K |
| APR. 12 | | | | | | 91 | 7.10 | 24.0 | | 25.0K |
| MAY 8 | | | | | | 51 | 6.50 | 20.0 | | 40.0 |
| MAY 17 | | | | | | 76 | 6.90 | 26.0 | | 25.0K |
| JUNE 13 | 57 | 12 | 69 | 30 | 24.0 | 122 | 7.50 | 29.0 | 40 | 25.0K |
| JULY 10 | | | | | | 87 | | 29.0 | | 25.0K |
| JULY 24 | | | | | | 76 | 7.50 | 31.0 | | 25.0K |
| AUG. 7 | | | | | | 77 | 6.60 | 29.0 | | 25.0K |
| AUG. 14 | | | | | | 79 | 7.00 | 31.0 | | 10.0 |
| SEP. 18 | | | | | | 92 | 7.20 | 27.0 | | 25.0K |
| SEP. 25 | 92 | 72 | 164 | 30 | 14.0 | 108 | 7.20 | 26.0 | 50 | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 28 | 6.3 | | 1.6 | | | |
| NOV. 8 | 7.8 | | 2.1 | | | |
| NOV. 17 | 6.5 | | 2.4 | | | |
| DEC. 7 | 10.0 | | 4.2 | 6800 | 18000 | 8300 |
| DEC. 21 | 10.3 | | 1.6 | | | |
| JAN. 26 | 9.8 | | 0.9 | | | |
| FEB. 16 | 12.2 | | 2.5 | | | |
| MAR. 7 | 11.3 | | 2.9 | 27 | 293 | 20 |
| APR. 12 | 8.8 | | 3.8 | | | |
| MAY 8 | 7.1 | | 2.1 | | | |
| MAY 17 | 8.1 | | 5.2 | | | |
| JUNE 13 | 7.6 | | 2.5 | 54 | 473 | 68 |
| JULY 10 | 7.3 | 94.0 | 2.4 | | | |
| JULY 24 | 8.0 | 107.0 | 2.4 | | | |
| AUG. 7 | 6.3 | 80.0 | 2.8 | | | |
| AUG. 14 | 5.6 | 75.0 | 2.8 | | | |
| SEP. 18 | 5.9 | 73.0 | 2.9 | | | |
| SEP. 25 | 6.4 | 78.0 | 2.5 | | | |
| SEP. 26 | | | | 106 | 1127 | 156 |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JUNE 13 | | 2K | 200K | | 25 | 100 | | 50K | 15 |
| SEP. 25 | | 2K | 50K | | 62 | 100K | 0.7K | 50 | 9 |

K Less than.

## 07249400 JAMES FORK NEAR HACKETT, ARK.

LOCATION.--Lat 35°09'45", long 94°24'25", in NW¼NW¼ sec.34, T.6 N., R.32 W., Sebastian County, at gaging station near left bank on downstream side of bridge on State Highway 45, 1.7 miles south of Hackett, 2 miles downstream from Elder Branch, 2 miles upstream from small tributary, and 3.6 miles upstream from Arkansas-Oklahoma State line.

DRAINAGE AREA.--147 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1960 to September 1961, October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 28 | 4 | | | | | 112 | | 9 | | |
| NOV. 8 | 4 | | | | | | | | | |
| NOV. 9 | | | | | | 65 | | 7 | | |
| NOV. 18 | 4 | | | | | 74 | | 7 | | |
| DEC. 7 | 107 | 200 | 100.0K | 19.2 | 13.1 | 43 | 25L | 6 | 0.100K | 0.100 |
| DEC. 21 | 109 | | | | | 8 | | 4 | | |
| JAN. 10 | 113 | | | | | 20 | | 6 | | |
| JAN. 26 | 27 | | | | | 33 | | 7 | | |
| FEB. 16 | 69 | | | | | 24 | | 7 | | |
| MAR. 7 | 17 | | | | | 47 | | 7 | 0.100K | 0.450 |
| APR. 12 | 11 | | | | | 61 | | 13 | | |
| MAY 8 | 22 | | | | | 40 | | 7 | | |
| MAY 17 | 8 | | | | | 61 | | 7 | | |
| JUNE 13 | 4 | 100 | 100.0 | 17.6 | 11.0 | 69 | 104 | 7 | 1.150 | 0.360 |
| JULY 10 | 3 | | | | | 162 | | 13 | | |
| JULY 24 | 3 | | | | | 180 | | 15 | | |
| AUG. 7 | 2 | | | | | 228 | | 18 | | |
| AUG. 14 | 0.3 | | | | | 156 | | 17 | | |
| SEP. 18 | 2 | | | | | 339 | | 26 | | |
| SEP. 25 | 1 | 280 | 170.0 | 17.0 | | 255 | 16 | 35 | 0.100 | 0.040 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 28 | | | | | | 500 | 7.40 | 20.0 | | 25.0K |
| NOV. 9 | | | | | | 333 | 7.50 | 9.0 | | 25.0K |
| NOV. 18 | | | | | | 222 | 7.30 | 14.0 | | 25.0 |
| DEC. 7 | 179 | 8 | 187 | 102 | 48.0 | 156 | 7.40 | 10.0 | 5 | 25.0K |
| DEC. 21 | | | | | | 117 | 6.70 | 10.0 | | 25.0K |
| JAN. 10 | | | | | | 103 | 6.70 | 9.0 | | 25.0K |
| JAN. 26 | | | | | | 172 | 7.20 | 9.0 | | 25.0K |
| FEB. 16 | | | | | | 142 | 6.80 | | | 25.0K |
| MAR. 7 | 168 | 10 | 178 | 64 | 30.0 | 186 | 7.40 | 14.0 | 15 | 25.0K |
| APR. 12 | | | | | | 254 | 7.60 | 24.0 | | 25.0K |
| MAY 8 | | | | | | 158 | 6.70 | 19.0 | | 35.0 |
| MAY 17 | | | | | | 357 | 7.40 | 26.0 | | 25.0K |
| JUNE 13 | 208 | 1 | 209 | 90 | 44.0 | 80 | 7.90 | 28.0 | 20 | 25.0K |
| JULY 10 | | | | | | 357 | | 29.0 | | 25.0K |
| JULY 24 | | | | | | 392 | 8.20 | 32.0 | | 25.0K |
| AUG. 7 | | | | | | 400 | 8.30 | 29.0 | | 25.0K |
| AUG. 14 | | | | | | 410 | 8.10 | 30.0 | | 17.0 |
| SEP. 18 | | | | | | 714 | 8.10 | 29.0 | | 30.0 |
| SEP. 25 | | | | 86 | 42.0 | 907 | 8.50 | 26.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 28 | 4.0 | | 1.8 | | | |
| NOV. 9 | 8.3 | | 1.2 | | | |
| NOV. 18 | 5.7 | | 3.7 | | | |
| DEC. 7 | 9.6 | | 1.7 | 180 | 580 | 470 |
| DEC. 21 | 10.0 | | 0.6 | | | |
| JAN. 10 | 10.6 | | 1.0 | | | |
| JAN. 26 | 11.0 | | 0.7 | | | |
| FEB. 16 | 10.9 | | 0.9 | | | |
| MAR. 7 | 9.9 | | 2.2 | 45 | 253 | 12 |
| APR. 12 | 7.9 | | 2.5 | | | |
| MAY 8 | 7.2 | | 1.7 | | | |
| MAY 17 | 9.0 | | 8.1 | | | |
| JUNE 13 | 7.7 | | 2.4 | 60 | 640 | 104 |
| JULY 10 | 12.6 | 162.0 | 4.2 | | | |
| JULY 24 | 8.1 | 109.0 | 3.0 | | | |
| AUG. 7 | 8.8 | 112.0 | 3.1 | | | |
| AUG. 14 | 6.8 | 89.0 | 2.1 | | | |
| SEP. 18 | 4.4 | 56.0 | 4.0 | | | |
| SEP. 25 | 10.1 | 123.0 | 3.9 | | | |
| SEP. 26 | | | | 49 | 1300 | 144 |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JUNE 13 | | 2 | 20K | | 25 | 100 | | 50K | 10 |
| SEP. 25 | | 2 | 50K | | 50 | 100K | 0.2K | 50 | 54 |

K Less than.
L Greater than.

## 07249440 POTEAU RIVER NEAR FORT SMITH, ARK.

LOCATION.--Lat 35°20'43", long 94°27'09", in SE¼SW¼ sec.9, T.10 N., R.27 E. LeFlore County, Okla., at bridge on State Highway 9, 1.2 miles west of State line, and 2.0 miles southwest of Fort Smith.

DRAINAGE AREA.--254 sq mi (at State line).

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 28 | | | | | | 16 | | 2 | | |
| NOV. 9 | | | | | | 27 | | 2 | | |
| NOV. 18 | | | | | | 30 | | 9 | | |
| DEC. 8 | | 1900 | 100.0K | 8.0 | 4.3 | 20 | 3 | 7 | 0.100K | 0.300 |
| DEC. 21 | | | | | | 8 | | 3 | | |
| JAN. 10 | | | | | | 9 | | 3 | | |
| JAN. 26 | | | | | | 16 | | 6 | | |
| FEB. 17 | | | | | | 24 | | 8 | | |
| MAR. 8 | | | | 5.6 | 4.4 | 23 | 14 | 6 | 0.100K | 0.280 |
| APR. 12 | | | | | | 21 | | 9 | | |
| MAY 8 | | | | | | 16 | | 5 | | |
| MAY 18 | | | | | | 17 | | 3 | | |
| JUNE 14 | | 800 | 570.0 | 12.0 | 3.0 | 38 | 21 | 8 | 0.600 | 0.230 |
| JULY 10 | | | | | | 27 | | 7 | | |
| JULY 24 | | | | | | 32 | | 35 | | |
| AUG. 8 | | | | | | | | 90 | | |
| AUG. 15 | | | | | | 45 | | 42 | | |
| SEP. 18 | | | | | | 58 | | 65 | | |
| SEP. 26 | | | | 18.0 | | 24 | 12 | 8 | 1.200 | 0.110 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 28 | | | | | | 47 | 6.50 | 25.0 | | 40.0 |
| NOV. 9 | | | | | | 62 | 6.90 | 14.0 | | 55.0 |
| NOV. 18 | | | | | | 80 | 6.90 | 15.0 | | 60.0 |
| DEC. 8 | 111 | 129 | 240 | 38 | 20.0 | 83 | 7.10 | 8.0 | 80 | 130.0 |
| DEC. 21 | | | | | | 30 | 6.40 | 10.0 | | 70.0 |
| JAN. 10 | | | | | | 30 | 8.20 | 9.0 | | 35.0 |
| JAN. 26 | | | | | | 65 | 7.20 | 9.0 | | 25.0K |
| FEB. 17 | | | | | | 103 | 6.80 | 11.0 | | 45.0 |
| MAR. 8 | 88 | 40 | 128 | 32 | 14.0 | 50 | 7.20 | 13.0 | 40 | 30.0 |
| APR. 12 | | | | | | 109 | 7.00 | 23.0 | | 50.0 |
| MAY 8 | | | | | | 53 | 6.50 | 20.0 | | 50.0 |
| MAY 18 | | | | | | 82 | 7.20 | 31.0 | | 40.0 |
| JUNE 14 | | | | 44 | 30.0 | 128 | 7.70 | 30.0 | 100 | 25.0K |
| JULY 10 | | | | | | 83 | | 31.0 | | 110.0 |
| JULY 24 | | | | | | 167 | 7.30 | 32.0 | | 140.0 |
| AUG. 8 | | | | | | 279 | 6.20 | 29.0 | | 110.0 |
| AUG. 15 | | | | | | 204 | 7.00 | 30.0 | | 54.0 |
| SEP. 18 | | | | | | 345 | 7.30 | 29.0 | | 60.0 |
| SEP. 26 | 202 | 2 | 204 | 70 | 44.0 | 250 | 7.30 | 24.0 | 160 | 75.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 28 | 7.7 | | 2.3 | | | |
| NOV. 9 | 5.6 | | 1.7 | | | |
| NOV. 18 | 6.1 | | 1.5 | | | |
| DEC. 8 | 10.7 | | 2.5 | 2000 | 12000 | 1900 |
| DEC. 21 | 10.5 | | 1.3 | | | |
| JAN. 10 | 11.0 | | 1.3 | | | |
| JAN. 26 | 12.2 | | 3.9 | | | |
| FEB. 17 | 11.3 | | 2.1 | | | |
| MAR. 7 | | | | 20 | 188 | 13 |
| MAR. 8 | 11.0 | | 3.1 | | | |
| APR. 12 | 9.1 | | 3.2 | | | |
| MAY 8 | 6.7 | | 1.8 | | | |
| MAY 18 | 9.8 | | 5.0 | | | |
| JUNE 14 | 8.1 | | 4.6 | 220 | 1300 | 75 |
| JULY 10 | 9.7 | 129.0 | 4.5 | | | |
| JULY 24 | 6.3 | 85.0 | 2.8 | | | |
| AUG. 8 | 3.5 | 85.0 | 9.0 | | | |
| AUG. 15 | 5.0 | 66.0 | 2.2 | | | |
| SEP. 18 | 5.6 | 72.0 | 2.4 | | | |
| SEP. 26 | 5.5 | 65.0 | 2.3 | 620 | 3300 | 1525 |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JUNE 14 | | 3 | 200K | | 25 | 100K | | 50 | 25 |
| SEP. 26 | | 2K | 50K | | | | 2.4K | | 17 |

K Less than.

## 07249703 LEE CREEK NEAR NATURAL DAM, ARK.

LOCATION.--Lat 35°38'03", long 94°24'18", in SE¼NW¼ sec.16, T.11 N., R.32 W., Crawford County, at left bank of stream, 1.0 mile southwest of Natural Dam.

DRAINAGE AREA.--1[illegible] sq mi (at Natural Dam).

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | 68 | | | | | 46 | | 10 | | |
| OCT. 20 | 35 | 50K | 30.0K | 12.8 | 4.4 | 40 | 6 | 11 | 0.100K | 0.010K |
| NOV. 1 | 27 | | | | | 40 | | 15 | | |
| NOV. 15 | 53 | | | | | 45 | | 12 | | |
| DEC. 13 | | | | | | 24 | | 2 | | |
| JAN. 24 | | | | | | 29 | | 5 | | |
| JAN. 25 | 51 | | | | | | | | | |
| JAN. 31 | 30 | | | | | 32 | | 4 | | |
| FEB. 8 | | | | | | | | | | |
| FEB. 14 | 169 | | | | | 29 | | 3 | | |
| MAR. 13 | 42 | | | | | 42 | | 6 | | |
| MAR. 28 | 101 | | | 10.4 | 1.9 | 33 | 8 | 5 | 0.100 | 0.170 |
| APR. 4 | | | | | | 28 | | 8 | | |
| APR. 18 | 66 | | | 11.2 | 4.4 | 30 | 10 | 2 | 0.100 | 0.060 |
| MAY 1 | | | | | | 25 | | 3 | | |
| MAY 15 | 21 | | | | | 28 | | 5 | | |
| MAY 30 | | | | 11.0 | 2.0 | 31 | 6 | 5 | 0.100 | 0.009 |
| MAY 31 | 22 | | | | | | | | | |
| JUNE 19 | 0 | | | | | 38 | | 7 | | |
| JULY 4 | 256 | | | | | 47 | | 5 | | |
| JULY 18 | 173 | 180 | 50.0K | 5.0 | 5.0 | 41 | 1K | 6 | 1.000 | 0.030 |
| JULY 31 | 12 | | | | | 43 | | 5 | | |
| AUG. 21 | | | | | | 43 | | 5 | | |
| AUG. 29 | 0 | | | | | 41 | | 5 | | |
| SEP. 18 | 0 | | | | | 40 | | 6 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | | | | | | 125 | 7.40 | 16.0 | | 25.0K |
| OCT. 20 | 70 | 0 | 70 | 50 | 32.0 | 100 | 7.50 | 19.5 | 0 | 25.0K |
| NOV. 1 | | | | | | 106 | 7.10 | 17.0 | | 25.0K |
| NOV. 15 | | | | | | 100 | 7.70 | 16.5 | | 25.0K |
| DEC. 13 | | | | | | 58 | 7.20 | 8.0 | | 25.0K |
| JAN. 24 | | | | | | 60 | 7.40 | 9.0 | | 25.0K |
| JAN. 31 | | | | | | 74 | 7.10 | 1.0 | | 25.0K |
| FEB. 14 | | | | | | 74 | 7.10 | 11.0 | | 25.0K |
| MAR. 13 | | | | | | 70 | 7.10 | 12.0 | | 25.0K |
| MAR. 28 | 53 | 2 | 55 | 34 | 26.0 | 55 | 6.50 | 10.0 | 0 | 25.0K |
| APR. 4 | | | | | | 83 | 7.50 | 15.0 | | 25.0K |
| APR. 18 | | | | | | 76 | 7.00 | | 20 | 25.0K |
| MAY 1 | | | | | | 62 | 6.70 | 15.0 | | 70.0 |
| MAY 15 | | | | | | 75 | 6.90 | | | 25.0K |
| MAY 30 | | | 60 | 38 | 28.0 | 53 | 7.10 | 19.0 | 15 | 25.0K |
| JUNE 19 | | | | | | 93 | 8.00 | | | 25.0K |
| JULY 4 | | | | | | 105 | 7.90 | 18.0 | | 25.0K |
| JULY 18 | 71 | 12 | 83 | 42 | 22.0 | 80 | 7.70 | 30.0 | 30 | 25.0K |
| JULY 31 | | | | | | 80 | 7.80 | 21.0 | | 25.0K |
| AUG. 21 | | | | | | 113 | 8.10 | | | 8.0 |
| AUG. 29 | | | | | | 109 | 7.60 | 27.0 | | 7.0 |
| SEP. 18 | | | | | | 100 | 6.90 | 22.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 5 | 8.5 | | 1.7 | | | |
| OCT. 20 | 9.5 | | 2.1 | | | |
| NOV. 1 | 8.2 | | 0.6 | | | |
| NOV. 15 | 11.5 | | 3.5 | | | |
| DEC. 13 | 11.5 | | 1.0 | | | |
| JAN. 24 | 11.2 | | 0.9 | | | |
| JAN. 31 | 13.0 | | 2.1 | | | |
| FEB. 14 | 11.6 | | 1.4 | | | |
| MAR. 13 | 9.3 | | 1.2 | | | |
| MAR. 28 | 9.6 | | 0.6 | 0 | 0 | 0 |
| APR. 4 | 10.5 | | 1.3 | | | |
| APR. 18 | 9.2 | | 0.3 | 10 | 1120 | 210 |
| MAY 1 | 8.3 | | 2.8 | | | |
| MAY 15 | 9.9 | | 2.9 | | | |
| MAY 30 | 7.7 | | 0.9 | | | |
| JUNE 19 | 9.9 | | 2.5 | | | |
| JULY 4 | 9.1 | 96.0 | 0.8 | | | |
| JULY 18 | 9.4 | 124.0 | 1.0 | | | |
| JULY 31 | 7.0 | 78.0 | 1.6 | | | |
| AUG. 21 | | | 3.4 | | | |
| AUG. 29 | 9.8 | 121.0 | 1.5 | | | |
| SEP. 18 | 6.1 | 65.0 | 2.0 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JULY 18 | | 2K | 100K | | 10K | 80K | 0.1K | 50K | 12 |
| SEP. 18 | | | | | | | | | |

K Less than.

## 07250550 ARKANSAS RIVER AT DAM NO. 13, NEAR VAN BUREN, ARK.
(Irrigation network and tritium station)

LOCATION.--Lat 35°20'56", long 94°17'54", in sec.28, T.8 N., R.31 W., Sebastian County, at gaging station in Dam No. 13 control house on right bank, and at mile 308.9.

DRAINAGE AREA.--150,547 sq mi, of which 22,241 sq mi is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1969 to September 1972.
Water temperature: October 1969 to September 1971.
Sediment discharge: October 1970 to September 1971.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | MEAN DIS-CHARGE (CFS) | INSTAN-TANEOUS DIS-CHARGE (CFS) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | DIS-SOLVED SULFATE (SO4) (MG/L) | DIS-SOLVED CHLO-RIDE (CL) (MG/L) | DIS-SOLVED NITRATE (N) (MG/L) | DIS-SOLVED NITRITE (N) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | |
| 01... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 14... | 13900 | 17100 | 102 | 0 | 84 | 38 | 110 | .40 | .01 |
| NOV. | | | | | | | | | |
| 10... | 17700 | 12400 | 108 | 0 | 88 | 32 | 50 | .10 | .00 |
| DEC. | | | | | | | | | |
| 15... | 90300 | 75000 | 76 | 0 | 62 | 60 | 140 | .41 | .04 |
| JAN. | | | | | | | | | |
| 19... | 33400 | 33600 | 90 | 0 | 74 | 29 | 55 | .41 | .02 |
| FEB. | | | | | | | | | |
| 09... | 16100 | 13400 | 110 | 0 | 90 | 37 | 120 | .61 | .02 |
| MAR. | | | | | | | | | |
| 08... | 7390 | 6190 | 116 | 0 | 95 | 41 | 160 | .20 | .02 |
| APR. | | | | | | | | | |
| 12... | 11300 | 4960 | 124 | 0 | 102 | 45 | 140 | .20 | .00 |
| MAY | | | | | | | | | |
| 10... | 18700 | 4150 | 120 | 0 | 98 | 48 | 160 | .18 | .01 |
| JUNE | | | | | | | | | |
| 07... | 10000 | 3580 | 120 | 0 | 98 | 40 | 87 | .09 | .02 |
| JULY | | | | | | | | | |
| 19... | 13800 | 5150 | 152 | 0 | 125 | 59 | 260 | .02 | .02 |
| AUG. | | | | | | | | | |
| 16... | 14600 | 10100 | 132 | 0 | 108 | 42 | 150 | .02 | .09 |
| SEP. | | | | | | | | | |
| 13... | 12700 | 2590 | 136 | 0 | 112 | 45 | 24 | .16 | .00 |

| DATE | DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L) | ORGANIC NITRO-GEN (N) (MG/L) | TOTAL PHOS-PHORUS (P) (MG/L) | HARD-NESS (CA,MG) (MG/L) | NON-CAR-BONATE HARD-NESS (MG/L) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | COLOR (PLAT-INUM-COBALT UNITS) | CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | |
| 01... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 14... | .00 | -- | .75 | 120 | 40 | 624 | 7.6 | 25 | 17 |
| NOV. | | | | | | | | | |
| 10... | .01 | .46 | .17 | 120 | 32 | 400 | 7.8 | 150 | 12 |
| DEC. | | | | | | | | | |
| 15... | .07 | -- | .20 | 97 | 35 | 663 | 7.6 | 120 | 15 |
| JAN. | | | | | | | | | |
| 19... | .06 | -- | .12 | 90 | 16 | 372 | 7.5 | -- | 13 |
| FEB. | | | | | | | | | |
| 09... | .04 | -- | .20 | 120 | 29 | 670 | 7.9 | 35 | 6 |
| MAR. | | | | | | | | | |
| 08... | .06 | .41 | .10 | 130 | 38 | 764 | 8.3 | 25 | 8 |
| APR. | | | | | | | | | |
| 12... | .04 | .18 | .06 | 140 | 42 | 733 | 8.2 | 25 | 17 |
| MAY | | | | | | | | | |
| 10... | .02 | .59 | .11 | 150 | 48 | 768 | 8.0 | 20 | 13 |
| JUNE | | | | | | | | | |
| 07... | .05 | .42 | .18 | 130 | 32 | 553 | 8.0 | 30 | 17 |
| JULY | | | | | | | | | |
| 19... | .04 | .48 | .08 | 190 | 66 | 1300 | 8.0 | 20 | 31 |
| AUG. | | | | | | | | | |
| 16... | .00 | .31 | .07 | 160 | 49 | 879 | 8.2 | 10 | 12 |
| SEP. | | | | | | | | | |
| 13... | .01 | .52 | .05 | 100 | 0 | 908 | 8.0 | 60 | 13 |

## 07250550 ARKANSAS RIVER AT DAM NO. 13, NEAR VAN BUREN, ARK.--continued
(Irrigation network and tritium station)

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | BIO-CHEM-ICAL OXYGEN DEMAND (MG/L) | IMME-DIATE COLI-FORM (COL. PER 100 ML) | FECAL COLI-FORM (COL. PER 100 ML) | STREP-TOCOCCI (COL-ONIES PER 100 ML) | ALDRIN (UG/L) | CHLOR-DANE (UG/L) | DDD (UG/L) | DDE (UG/L) | DDT (UG/L) |
|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | |
| 01... | -- | -- | -- | -- | .00 | .0 | .00 | .00 | .00 |
| 14... | 3.2 | E91000 | 20000 | 140 | -- | -- | -- | -- | -- |
| NOV. | | | | | | | | | |
| 10... | 1.4 | E96000 | 6700 | E5000 | -- | -- | -- | -- | -- |
| DEC. | | | | | | | | | |
| 15... | 2.5 | E11000 | E6000 | 440 | -- | -- | -- | -- | -- |
| JAN. | | | | | | | | | |
| 19... | 2.3 | 22000 | 6700 | 200 | -- | -- | -- | -- | -- |
| FEB. | | | | | | | | | |
| 09... | 2.0 | 23000 | E1700 | 240 | -- | -- | -- | -- | -- |
| MAR. | | | | | | | | | |
| 08... | 4.6 | E4000 | E2000 | E12 | -- | -- | -- | -- | -- |
| APR. | | | | | | | | | |
| 12... | 4.3 | 74000 | E440 | E12 | -- | -- | -- | -- | -- |
| MAY | | | | | | | | | |
| 10... | 2.8 | >8000 | >2000 | 128 | -- | -- | -- | -- | -- |
| JUNE | | | | | | | | | |
| 07... | 3.0 | 12000 | E1700 | 120 | -- | -- | -- | -- | -- |
| JULY | | | | | | | | | |
| 19... | 2.6 | 60000 | 15300 | 70 | -- | -- | -- | -- | -- |
| AUG. | | | | | | | | | |
| 16... | 3.3 | 19000 | 710 | 60 | -- | -- | -- | -- | -- |
| SEP. | | | | | | | | | |
| 13... | 2.8 | E7800 | E2600 | E330 | -- | -- | -- | -- | -- |

| DATE | DI-AZINON (UG/L) | DI-ELDRIN (UG/L) | ENDRIN (UG/L) | HEPTA-CHLOR (UG/L) | HEPTA-CHLOR EPOXIDE (UG/L) | LINDANE (UG/L) | MALA-THION (UG/L) | METHYL PARA-THION (UG/L) | PARA-THION (UG/L) | TOX-APHENE (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | |
| 01... | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .0 |
| 01-10 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-20 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21-30 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 31... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV. | | | | | | | | | | |
| 01-10 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-20 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21-29 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 30... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC. | | | | | | | | | | |
| 01-10 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-20 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21-30 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 31... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | 2,4-D (UG/L) | 2,4,5-T (UG/L) | SILVEX (UG/L) | TOTAL ARSENIC (AS) (UG/L) | TOTAL CAD-MIUM (CD) (UG/L) | HEXA-VALENT CHRO-MIUM (CR6) (UG/L) | TOTAL COBALT (CO) (UG/L) | TOTAL LEAD (PB) (UG/L) | TOTAL MERCURY (HG) (UG/L) | TOTAL ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | |
| 01... | .00 | .03 | .00 | -- | -- | -- | -- | -- | -- | -- |
| 01-10 | -- | -- | -- | <10 | 0 | <10 | 1 | 2 | <.5 | 40 |
| 11-20 | -- | -- | -- | <10 | 0 | <10 | 1 | 0 | <.5 | 30 |
| 21-30 | -- | -- | -- | <10 | 0 | <10 | 1 | 0 | <.5 | 40 |
| 31... | -- | -- | -- | <10 | 0 | <10 | 1 | 1 | <.5 | 40 |
| NOV. | | | | | | | | | | |
| 01-10 | -- | -- | -- | <10 | 0 | <10 | 1 | 0 | <.5 | 40 |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | 1.1 | -- |
| 11-20 | -- | -- | -- | <10 | 0 | <10 | 0 | 2 | <.5 | 20 |
| 21-29 | -- | -- | -- | <10 | 0 | <10 | 0 | 1 | <.5 | 30 |
| 30... | -- | -- | -- | <10 | 0 | <10 | 0 | 3 | <.5 | 30 |
| DEC. | | | | | | | | | | |
| 01-10 | -- | -- | -- | <10 | 0 | <10 | 0 | 2 | <.5 | 60 |
| 11-20 | -- | -- | -- | <10 | 0 | <10 | 1 | 4 | <.5 | 40 |
| 21-30 | -- | -- | -- | <10 | 0 | <10 | 0 | 3 | <.5 | 20 |
| 31... | -- | -- | -- | <10 | 0 | <10 | 1 | 9 | <.5 | 30 |

> GREATER THAN.
< LESS THAN.
E ESTIMATED.

## 07250550 ARKANSAS RIVER AT DAM NO. 13, NEAR VAN BUREN, ARK.--continued
(Irrigation network and tritium station)

### TRITIUM CONCENTRATIONS IN TRITIUM UNITS, OCTOBER 1970 TO SEPTEMBER 1972

| DATE | TOTAL TRITIUM (UNITS) |
|---|---|
| OCT. | |
| 20, 1970 | 108.0 ±4.0 |
| DEC. | |
| 16...... | 72.0 ±2.4 |
| JAN. | |
| 03, 1971 | 83.8 ±6.2 |
| 27...... | 83.6 ±4.1 |
| FEB. | |
| 24...... | 89.5 ±9.9 |
| MAR. | |
| 10...... | 79.0 ±3.3 |
| APR. | |
| 14...... | 83.0 ±5.0 |
| MAY | |
| 12, 1971 | 93.1 ±5.5 |
| JUNE | |
| 30...... | 87.5 ±2.9 |
| JULY | |
| 21...... | 100.0 ±16.0 |
| SEP. | |
| 03...... | 87.2 ±3.4 |
| 22...... | 71.4 ±3.3 |
| OCT. | |
| 22...... | 63.0 ±2.6 |
| NOV. | |
| 22...... | 75.1 ±3.3 |
| DEC. | |
| 29, 1971 | 58.1 ±2.6 |
| JAN. | |
| 14, 1972 | 46.0 ±2.3 |
| FEB. | |
| 04...... | 73.1 ±3.2 |
| MAR. | |
| 03...... | 70.1 ±3.5 |
| APR. | |
| 12...... | 64.5 ±3.2 |

### FIELD ANALYSES

| DATE | MEAN DIS-CHARGE (CFS) | INSTAN-TANEOUS DIS-CHARGE (CFS) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | DIS-SOLVED OXYGEN (MG/L) | PER-CENT SATUR-ATION |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | |
| 01... | -- | -- | -- | -- | -- | -- | -- | 23.0 | -- | -- |
| 14... | 13900 | 17100 | 100 | 0 | 82 | 620 | 7.8 | 21.0 | 8.4 | 93 |
| NOV. | | | | | | | | | | |
| 10... | 17700 | 12400 | 108 | 0 | 88 | 625 | 8.0 | 14.0 | 9.5 | 91 |
| DEC. | | | | | | | | | | |
| 15... | 90300 | 75000 | 76 | 0 | 62 | 680 | 6.8 | 9.0 | 9.2 | 79 |
| JAN. | | | | | | | | | | |
| 19... | 33600 | 33600 | 80 | 0 | 66 | 360 | 7.3 | 6.0 | 11.2 | 90 |
| FEB. | | | | | | | | | | |
| 09... | 16100 | 13600 | 106 | 0 | 87 | 720 | 8.2 | *4.5 | 11.6 | 89 |
| MAR. | | | | | | | | | | |
| 08... | 7300 | 6100 | 80 | 18 | 96 | 720 | 8.8 | 10.5 | 10.7 | 96 |
| APR. | | | | | | | | | | |
| 12... | 11300 | 4960 | 102 | 14 | 107 | 750 | 8.4 | 16.0 | 9.0 | 91 |
| MAY | | | | | | | | | | |
| 10... | 19700 | 4150 | 116 | 0 | 95 | 730 | 7.9 | 19.0 | 8.1 | 86 |
| JUNE | | | | | | | | | | |
| 07... | 10000 | 3580 | 138 | 0 | 113 | 510 | 8.0 | 26.0 | 8.0 | 98 |
| JULY | | | | | | | | | | |
| 19... | 13800 | 5150 | 136 | 0 | 112 | 1150 | 7.8 | 28.0 | 7.6 | 96 |
| AUG. | | | | | | | | | | |
| 16... | 14600 | 10100 | 136 | 0 | 112 | 850 | 8.0 | 28.5 | 7.0 | 90 |
| SEP. | | | | | | | | | | |
| 13... | 12700 | 2590 | 138 | 0 | 113 | 800 | 8.1 | 26.0 | 7.9 | 96 |

## 07257000 BIG PINEY CREEK NEAR DOVER, ARK.

LOCATION.--Lat 35°32'58", long 93°09'30", in SW¼NE¼ sec.6, T.10 N., R.20 W., Pope County, at gaging station on left bank 7.2 miles downstream from Indian Creek, 10.4 miles north of Dover, and at mile 28.0.

DRAINAGE AREA.--274 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1953 to October 1961, October 1970 to September 1972.
Water temperature: October 1955 to September 1956.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | MEAN DIS- CHARGE (CFS) | DIS- SOLVED SILICA (SIO2) (MG/L) | DIS- SOLVED IRON (FE) (UG/L) | DIS- SOLVED MAN- GANESE (MN) (UG/L) | DIS- SOLVED CAL- CIUM (CA) (MG/L) | DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) | DIS- SOLVED SODIUM (NA) (MG/L) | DIS- SOLVED PO- TAS- SIUM (K) (MG/L) | BICAR- BONATE (HCO3) (MG/L) | CAR- BONATE (CO3) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 19... | .53 | 2.3 | 20 | 20 | 11 | 2.0 | 3.2 | 1.1 | 46 | 0 |
| NOV. 15... | 7.3 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC. 13... | 1100 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN. 17... | 140 | -- | 0 | 10 | -- | -- | -- | -- | -- | -- |
| FEB. 22... | 169 | -- | -- | -- | -- | -- | -- | -- | 24 | 0 |
| MAR. 28... | 353 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY 06... | 530 | 6.8 | 20 | 0 | 5.2 | 1.3 | 1.2 | .5 | 20 | 0 |
| JUNE 05... | 18 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JULY 06... | 87 | -- | 30 | 0 | -- | -- | -- | -- | -- | -- |
| AUG. 14... | 1.2 | -- | -- | -- | -- | -- | -- | -- | 48 | 0 |
| SEP. 18... | .05 | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | ALKA- LINITY AS CACO3 (MG/L) | DIS- SOLVED SULFATE (SO4) (MG/L) | DIS- SOLVED CHLO- RIDE (CL) (MG/L) | DIS- SOLVED FLUO- RIDE (F) (MG/L) | DIS- SOLVED NITRATE (N) (MG/L) | DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) | ORGANIC NITRO- GEN (N) (MG/L) | TOTAL PHOS- PHORUS (P) (MG/L) | DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) | DIS- SOLVED SOLIDS (TONS PER AC-FT) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 19... | 38 | 2.2 | 2.9 | .0 | .00 | .00 | .16 | .00 | 50 | .07 |
| NOV. 15... | -- | -- | -- | -- | -- | .00 | .12 | .01 | -- | -- |
| DEC. 13... | -- | -- | -- | -- | -- | .00 | .03 | .02 | -- | -- |
| JAN. 17... | -- | -- | -- | -- | -- | .00 | .27 | .02 | -- | -- |
| FEB. 22... | 20 | -- | -- | -- | .02 | .00 | .07 | .00 | -- | -- |
| MAR. 28... | -- | -- | -- | -- | .00 | .02 | .05 | .04 | -- | -- |
| MAY 06... | 16 | 4.2 | 1.6 | .0 | .07 | .01 | .13 | .00 | 36 | .05 |
| JUNE 05... | -- | -- | -- | -- | .02 | .03 | .04 | .01 | -- | -- |
| JULY 06... | -- | -- | -- | -- | .00 | .06 | .13 | .02 | -- | -- |
| AUG. 14... | 39 | -- | -- | -- | .00 | .00 | .13 | .01 | -- | -- |
| SEP. 18... | -- | -- | -- | -- | .04 | .05 | .06 | .00 | -- | -- |

## 07257000 BIG PINEY CREEK NEAR DOVER, ARK.--continued

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DIS-SOLVED SOLIDS (TONS PER DAY) | HARD-NESS (CA,MG) (MG/L) | NON-CAR-BONATE HARD-NESS (MG/L) | PERCENT SODIUM | SODIUM AD-SORP-TION RATIO | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | COLOR (PLAT-INUM-COBALT UNITS) | TUR-BID-ITY (MG/L) | CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | |
| 19... | .07 | 36 | 0 | 16 | .2 | 97 | 7.1 | 5 | 5 | 4 |
| NOV. | | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | 76 | 6.8 | 10 | 15 | 1 |
| DEC. | | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | 42 | 7.3 | 35 | 20 | 2 |
| JAN. | | | | | | | | | | |
| 17... | -- | -- | -- | -- | -- | 48 | 7.3 | 5 | 6 | 0 |
| FEB. | | | | | | | | | | |
| 22... | -- | -- | -- | -- | -- | 53 | 7.3 | 10 | 10 | 0 |
| MAR. | | | | | | | | | | |
| 28... | -- | -- | -- | -- | -- | 56 | 7.0 | 15 | 15 | 2 |
| MAY | | | | | | | | | | |
| 06... | 51.5 | 18 | 2 | 12 | .1 | 40 | 7.0 | 40 | 25 | 2 |
| JUNE | | | | | | | | | | |
| 05... | -- | -- | -- | -- | -- | 72 | 7.2 | 5 | 15 | 6 |
| JULY | | | | | | | | | | |
| 06... | -- | -- | -- | -- | -- | 59 | 7.3 | 5 | 15 | -- |
| AUG. | | | | | | | | | | |
| 14... | -- | -- | -- | -- | -- | 86 | 7.3 | 5 | 15 | -- |
| SEP. | | | | | | | | | | |
| 18... | -- | -- | -- | -- | -- | 98 | 7.4 | 4 | 3 | 7 |

| DATE | DIS-SOLVED ARSENIC (AS) (UG/L) | DIS-SOLVED CAD-MIUM (CD) (UG/L) | HEXA-VALENT CHRO-MIUM (CR6) (UG/L) | DIS-SOLVED COBALT (CO) (UG/L) | DIS-SOLVED COPPER (CU) (UG/L) | DIS-SOLVED LEAD (PB) (UG/L) | DIS-SOLVED LITHIUM (LI) (UG/L) | DIS-SOLVED MERCURY (HG) (UG/L) | DIS-SOLVED NICKEL (NI) (UG/L) | DIS-SOLVED SILVER (AG) (UG/L) | DIS-SOLVED ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | |
| 19... | <10 | 1 | <10 | 0 | 7 | 13 | 0 | 1.5 | 2 | 5 | 10 |
| NOV. | | | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | 3.2 | -- | -- | -- |
| JAN. | | | | | | | | | | | |
| 17... | <10 | 0 | <10 | 0 | 1 | 1 | -- | <.5 | 1 | 0 | 0 |
| MAY | | | | | | | | | | | |
| 06... | <10 | 0 | <10 | 0 | 3 | 3 | -- | .7 | 0 | -- | 10 |
| JULY | | | | | | | | | | | |
| 06... | <10 | 0 | <10 | 0 | 2 | 1 | -- | <.5 | 0 | -- | 0 |

### FIELD ANALYSES

| DATE | MEAN DIS-CHARGE (CFS) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | DIS-SOLVED OXYGEN (MG/L) | PER-CENT SATUR-ATION |
|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | |
| 19... | .53 | 40 | 0 | 33 | 83 | 7.5 | 22.0 | 8.2 | 93 |
| NOV. | | | | | | | | | |
| 15... | 7.3 | -- | -- | -- | 75 | 7.4 | 17.0 | 9.0 | 93 |
| DEC. | | | | | | | | | |
| 13... | 1180 | -- | -- | -- | 37 | 6.7 | 9.0 | 10.8 | 93 |
| JAN. | | | | | | | | | |
| 17... | 140 | -- | -- | -- | 45 | 7.0 | 2.0 | 14.6 | 106 |
| FEB. | | | | | | | | | |
| 22... | 169 | 24 | 0 | 20 | 45 | 7.3 | 7.5 | 6.0 | 50 |
| MAR. | | | | | | | | | |
| 28... | 353 | -- | -- | -- | 54 | -- | 13.0 | 11.2 | 106 |
| MAY | | | | | | | | | |
| 06... | 530 | 32 | 0 | 26 | 41 | 7.6 | 15.0 | 10.7 | 106 |
| JUNE | | | | | | | | | |
| 05... | 18 | 36 | 0 | 30 | 68 | 7.4 | 25.5 | 8.4 | 102 |
| JULY | | | | | | | | | |
| 06... | 87 | 30 | 0 | 25 | 56 | 7.5 | 22.0 | 9.0 | 102 |
| AUG. | | | | | | | | | |
| 14... | 1.2 | 45 | 0 | 37 | 89 | 7.5 | 29.0 | 7.3 | 95 |
| SEP. | | | | | | | | | |
| 18... | .05 | 46 | 0 | 38 | 107 | 7.2 | 28.0 | 6.8 | 86 |

< LESS THAN.

## 07257500 ILLINOIS BAYOU NEAR SCOTTSVILLE, ARK.

LOCATION.--Lat 35°27'58", long 93°02'28", in SE¼SW¼ sec.32, T.10 N., R.19 W., Pope County, at bridge on county road 1.3 miles north of Scottsville.

DRAINAGE AREA.--241 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1953 to September 1960, October 1970 to September 1972.
Water temperature: October 1955 to September 1956.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DIS-SOLVED SILICA (SIO2) (MG/L) | DIS-SOLVED IRON (FE) (UG/L) | DIS-SOLVED MAN-GANESE (MN) (UG/L) | DIS-SOLVED CAL-CIUM (CA) (MG/L) | DIS-SOLVED MAG-NE-SIUM (MG) (MG/L) | DIS-SOLVED SODIUM (NA) (MG/L) | DIS-SOLVED PO-TAS-SIUM (K) (MG/L) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | |
| 19... | 4.5 | 20 | 40 | 4.4 | 1.5 | 2.7 | .9 | 22 | 0 | 18 |
| NOV. | | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC. | | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN. | | | | | | | | | | |
| 17... | -- | 10 | 20 | -- | -- | -- | -- | -- | -- | -- |
| FEB. | | | | | | | | | | |
| 22... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR. | | | | | | | | | | |
| 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY | | | | | | | | | | |
| 02... | 7.0 | 50 | 0 | 2.8 | 1.1 | 1.3 | .6 | 8 | 0 | 6 |
| JUNE | | | | | | | | | | |
| 05... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JULY | | | | | | | | | | |
| 06... | -- | 20 | 0 | -- | -- | -- | -- | -- | -- | -- |
| AUG. | | | | | | | | | | |
| 14... | -- | -- | -- | -- | -- | -- | -- | 26 | 0 | 21 |
| SEP. | | | | | | | | | | |
| 18... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | DIS-SOLVED SULFATE (SO4) (MG/L) | DIS-SOLVED CHLO-RIDE (CL) (MG/L) | DIS-SOLVED FLUO-RIDE (F) (MG/L) | DIS-SOLVED NITRATE (N) (MG/L) | DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L) | ORGANIC NITRO-GEN (N) (MG/L) | TOTAL PHOS-PHORUS (P) (MG/L) | DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L) | DIS-SOLVED SOLIDS (TONS PER AC-FT) |
|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | |
| 19... | 2.6 | 3.6 | .0 | .02 | .01 | .07 | .00 | 35 | .05 |
| NOV. | | | | | | | | | |
| 15... | -- | -- | -- | -- | .01 | .11 | .04 | -- | -- |
| DEC. | | | | | | | | | |
| 13... | -- | -- | -- | -- | .00 | .12 | .01 | -- | -- |
| JAN. | | | | | | | | | |
| 17... | -- | -- | -- | -- | .03 | .37 | .02 | -- | -- |
| FEB. | | | | | | | | | |
| 22... | -- | -- | -- | -- | .00 | .02 | .00 | -- | -- |
| MAR. | | | | | | | | | |
| 28... | -- | -- | -- | -- | .00 | .03 | .02 | -- | -- |
| MAY | | | | | | | | | |
| 02... | 4.6 | 1.4 | .0 | .04 | .00 | .04 | .00 | 27 | .04 |
| JUNE | | | | | | | | | |
| 05... | -- | -- | -- | -- | .03 | .00 | .01 | -- | -- |
| JULY | | | | | | | | | |
| 06... | -- | -- | -- | -- | .00 | .07 | .02 | -- | -- |
| AUG. | | | | | | | | | |
| 14... | -- | -- | -- | .04 | .00 | .08 | .02 | -- | -- |
| SEP. | | | | | | | | | |
| 18... | -- | -- | -- | .09 | .00 | .20 | .00 | -- | -- |

## 07257500 ILLINOIS BAYOU NEAR SCOTTSVILLE, ARK.--continued

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | HARD-NESS (CA,MG) (MG/L) | NON-CAR-BONATE HARD-NESS (MG/L) | PERCENT SODIUM | SODIUM AD-SORP-TION RATIO | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | COLOR (PLAT-INUM-COBALT UNITS) | TUR-BID-ITY (MG/L) | CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|
| OCT. 19... | 17 | 0 | 24 | .3 | 60 | 6.7 | 5 | 9 | 31 |
| NOV. 15... | -- | -- | -- | -- | 46 | 6.5 | 10 | 15 | 0 |
| DEC. 13... | -- | -- | -- | -- | 29 | 6.9 | 25 | 25 | 3 |
| JAN. 17... | -- | -- | -- | -- | 30 | 7.0 | 15 | 8 | 2 |
| FEB. 22... | -- | -- | -- | -- | 39 | 7.5 | 20 | 20 | 1 |
| MAR. 28... | -- | -- | -- | -- | 32 | 6.9 | 20 | 10 | 5 |
| MAY 02... | 12 | 5 | 19 | .2 | 33 | 6.8 | 60 | 30 | 5 |
| JUNE 05... | -- | -- | -- | -- | 49 | 7.0 | 10 | 15 | 6 |
| JULY 06... | -- | -- | -- | -- | 37 | 7.0 | 5 | 15 | -- |
| AUG. 14... | -- | -- | -- | -- | 52 | 7.0 | 5 | 25 | 5 |
| SEP. 18... | -- | -- | -- | -- | 61 | 7.3 | 1 | 15 | 0 |

| DATE | DIS-SOLVED ARSENIC (AS) (UG/L) | DIS-SOLVED CAD-MIUM (CD) (UG/L) | HEXA-VALENT CHRO-MIUM (CR6) (UG/L) | DIS-SOLVED COBALT (CO) (UG/L) | DIS-SOLVED COPPER (CU) (UG/L) | DIS-SOLVED LEAD (PB) (UG/L) | DIS-SOLVED LITHIUM (LI) (UG/L) | DIS-SOLVED MERCURY (HG) (UG/L) | DIS-SOLVED NICKEL (NI) (UG/L) | DIS-SOLVED SILVER (AG) (UG/L) | DIS-SOLVED ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 19... | <10 | 1 | <10 | 0 | 6 | 6 | 0 | 1.1 | 2 | 4 | 20 |
| NOV. 15... | -- | -- | -- | -- | -- | -- | -- | 2.8 | -- | -- | -- |
| JAN. 17... | <10 | 0 | <10 | 0 | 2 | 1 | -- | .5 | 2 | 0 | 10 |
| MAY 02... | <10 | 0 | <10 | 0 | 1 | 0 | -- | .8 | 0 | -- | 8 |
| JULY 06... | <10 | 0 | <10 | 0 | 1 | 1 | -- | .5 | 0 | -- | 0 |

### FIELD ANALYSES

| DATE | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | DIS-SOLVED OXYGEN (MG/L) | PER-CENT SATUR-ATION |
|---|---|---|---|---|---|---|---|---|
| OCT. 19... | -- | -- | -- | 65 | 6.9 | 22.0 | 8.5 | 96 |
| NOV. 15... | -- | -- | -- | 37 | 7.3 | 22.0 | 8.5 | 96 |
| DEC. 13... | -- | -- | -- | 26 | 6.8 | 9.0 | 11.9 | 102 |
| JAN. 17... | -- | -- | -- | 20 | 6.8 | 3.0 | 12.6 | 93 |
| FEB. 22... | 16 | 0 | 13 | 29 | 7.0 | 7.0 | 6.3 | 52 |
| MAR. 28... | -- | -- | -- | 31 | -- | 13.0 | 11.0 | 104 |
| MAY 02... | 12 | 0 | 10 | 26 | 7.1 | 16.0 | 10.4 | 100 |
| JUNE 05... | 24 | 0 | 20 | 30 | 7.1 | 26.0 | 8.0 | 98 |
| JULY 06... | 20 | 0 | 16 | 41 | 6.8 | 24.0 | 9.4 | 110 |
| AUG. 14... | 26 | 0 | 21 | 52 | 7.1 | 29.0 | 7.2 | 96 |
| SEP. 18... | 30 | 0 | 31 | -- | 7.3 | 25.5 | 5.8 | 71 |

< LESS THAN.

## 07258000 ARKANSAS RIVER AT DARDANELLE, ARK.

LOCATION.--Lat 35°13'34", long 93°08'58", in SW¼ sec.29, T.7 N., R.20 W., Yell County, at gaging station near left bank on downstream side of bridge on State Highway 7 at Dardanelle, 1 mile upstream from Whig Creek, 2.0 miles downstream from Dardanelle Dam, 4.7 miles downstream from Illinois Bayou, and at mile 255.8.

DRAINAGE AREA.--153,707 sq mi, of which 22,241 sq mi is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1948 to September 1961, August 1962 to August 1963.
Water temperature: October 1948 to September 1961, July 1971 to September 1972.
Sediment records: October 1967 to September 1971.

EXTREMES.--Current year:
Water temperature: Maximum, 29.5°C July 27-30.

Period of record:
Water temperature (1948-61, July 1971-72): Maximum, 34°C Aug. 17, 1952; minimum, freezing point on several days during winter months.

### FIELD ANALYSES

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) |
|---|---|
| FEB. | |
| 22... | 630 |
| MAR. | |
| 28... | 640 |
| MAY | |
| 01... | 610 |
| JUNE | |
| 08... | 530 |
| JULY | |
| 06... | 570 |
| AUG. | |
| 15... | 1040 |
| SEP. | |
| 18... | 950 |

WATER TEMPERATURE (°C), JULY TO SEPTEMBER 1971
(CONTINUOUS THERMOGRAPH)

| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | 27.0 | 27.0 | 27.5 | 27.5 |
| 2 | --- | --- | --- | --- | --- | --- | --- | --- | 27.0 | 26.5 | 27.5 | 27.5 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | 26.5 | 26.5 | 27.5 | 27.5 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | 26.5 | 26.5 | 27.5 | 27.5 |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | 26.5 | 26.5 | 27.5 | 27.5 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | 26.5 | 26.5 | 27.5 | 27.5 |
| 7 | --- | --- | --- | --- | --- | --- | --- | --- | 26.5 | 26.5 | 27.5 | 27.0 |
| 8 | --- | --- | --- | --- | --- | --- | --- | --- | 26.5 | 26.5 | 27.5 | 27.5 |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | 27.0 | 26.5 | 28.0 | 27.5 |
| 10 | --- | --- | --- | --- | --- | --- | --- | --- | 27.0 | 27.0 | 28.0 | 28.0 |
| 11 | --- | --- | --- | --- | --- | --- | --- | --- | 27.5 | 27.0 | 28.0 | 28.0 |
| 12 | --- | --- | --- | --- | --- | --- | --- | --- | 27.5 | 27.5 | 28.5 | 27.5 |
| 13 | --- | --- | --- | --- | --- | --- | --- | --- | 27.5 | 27.0 | 28.0 | 27.5 |
| 14 | --- | --- | --- | --- | --- | --- | --- | --- | 27.5 | 27.0 | 28.0 | 27.5 |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | 27.5 | 27.5 | 27.5 | 27.5 |
| 16 | --- | --- | --- | --- | --- | --- | --- | --- | 28.0 | 27.5 | 27.5 | 27.5 |
| 17 | --- | --- | --- | --- | --- | --- | --- | --- | 28.0 | 28.0 | 27.5 | 27.0 |
| 18 | --- | --- | --- | --- | --- | --- | --- | --- | 28.0 | 27.5 | 27.0 | 27.0 |
| 19 | --- | --- | --- | --- | --- | --- | --- | --- | 27.5 | 27.5 | 27.0 | 25.5 |
| 20 | --- | --- | --- | --- | --- | --- | --- | --- | 27.5 | 27.5 | 25.5 | 24.5 |
| 21 | --- | --- | --- | --- | --- | --- | --- | --- | 28.0 | 27.5 | 24.5 | 24.0 |
| 22 | --- | --- | --- | --- | --- | --- | --- | --- | 28.0 | 28.0 | 24.5 | 24.0 |
| 23 | --- | --- | --- | --- | --- | --- | --- | --- | 28.0 | 27.5 | 24.0 | 23.5 |
| 24 | --- | --- | --- | --- | --- | --- | --- | --- | 27.5 | 27.5 | 23.5 | 23.0 |
| 25 | --- | --- | --- | --- | --- | --- | --- | --- | 28.0 | 27.5 | 23.0 | 22.5 |
| 26 | --- | --- | --- | --- | --- | --- | --- | --- | 28.5 | 28.0 | 22.5 | 22.5 |
| 27 | --- | --- | --- | --- | --- | --- | --- | --- | 28.5 | 28.5 | 22.5 | 22.5 |
| 28 | --- | --- | --- | --- | --- | --- | --- | --- | 28.5 | 28.5 | 23.0 | 23.0 |
| 29 | --- | --- | --- | --- | --- | --- | 27.5 | 27.5 | 28.5 | 28.0 | 23.0 | 23.0 |
| 30 | --- | --- | --- | --- | --- | --- | 27.5 | 27.5 | 28.0 | 27.5 | 23.5 | 23.0 |
| 31 | --- | --- | --- | --- | --- | --- | 27.5 | 27.0 | 27.5 | 27.5 | --- | --- |
| MONTH | --- | --- | --- | --- | --- | --- | --- | --- | 28.5 | 26.5 | 28.5 | 22.5 |

07258000 ARKANSAS RIVER AT DARDANELLE, ARK.--continued

WATER TEMPERATURE (°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS THERMOGRAPH)

| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1 | 23.5 | 23.5 | 20.5 | 20.5 | --- | --- | --- | --- | --- | --- | 8.0 | 8.0 |
| 2 | 23.5 | 23.5 | 20.5 | 20.5 | --- | --- | --- | --- | --- | --- | 8.5 | 8.0 |
| 3 | 23.5 | 23.5 | 20.5 | 20.0 | --- | --- | --- | --- | --- | --- | 9.0 | 9.0 |
| 4 | 23.5 | 23.5 | 20.0 | 19.0 | --- | --- | --- | --- | --- | --- | 9.0 | 9.0 |
| 5 | 23.5 | 23.5 | 19.0 | 19.0 | --- | --- | --- | --- | --- | --- | 9.0 | 9.0 |
| 6 | 23.5 | 23.5 | 19.0 | 18.0 | --- | --- | --- | --- | --- | --- | 9.0 | 9.0 |
| 7 | 23.5 | 23.0 | 18.0 | 17.5 | --- | --- | --- | --- | --- | --- | 9.5 | 9.0 |
| 8 | 23.0 | 23.0 | 17.5 | 16.5 | --- | --- | --- | --- | --- | --- | 9.5 | 9.5 |
| 9 | 23.5 | 23.0 | 16.5 | 16.0 | --- | --- | --- | --- | --- | --- | 9.5 | 9.5 |
| 10 | 23.0 | 22.5 | 16.0 | 15.5 | --- | --- | --- | --- | 7.0 | 7.0 | 10.0 | 9.5 |
| 11 | 22.5 | 22.5 | 15.5 | 15.0 | --- | --- | --- | --- | 7.0 | 7.0 | 10.5 | 10.0 |
| 12 | 22.5 | 22.0 | 15.0 | 14.5 | --- | --- | --- | --- | 7.0 | 7.0 | 11.5 | 10.5 |
| 13 | 22.0 | 21.5 | 14.5 | 14.0 | --- | --- | --- | --- | 7.0 | 6.5 | 11.5 | 10.5 |
| 14 | 21.5 | 21.5 | 14.0 | 14.0 | --- | --- | --- | --- | 7.0 | 6.5 | 12.5 | 11.5 |
| 15 | 21.5 | 21.5 | 14.0 | 14.0 | --- | --- | --- | --- | 7.0 | 6.5 | 11.5 | 11.5 |
| 16 | 21.5 | 21.5 | 14.0 | 14.0 | --- | --- | --- | --- | 6.5 | 6.5 | 12.5 | 11.5 |
| 17 | 21.5 | 21.5 | --- | --- | --- | --- | --- | --- | 6.5 | 6.0 | 12.5 | 12.5 |
| 18 | 21.5 | 21.0 | --- | --- | --- | --- | --- | --- | 6.5 | 6.5 | 13.0 | 12.5 |
| 19 | 21.0 | 21.0 | --- | --- | --- | --- | --- | --- | 6.5 | 6.5 | 13.5 | 13.0 |
| 20 | 21.0 | 21.0 | --- | --- | --- | --- | --- | --- | 6.5 | 6.5 | 13.5 | 13.0 |
| 21 | 21.0 | 21.0 | --- | --- | --- | --- | --- | --- | 6.5 | 6.5 | 13.5 | 13.0 |
| 22 | 21.0 | 21.0 | --- | --- | --- | --- | --- | --- | 6.5 | 6.5 | 14.0 | 13.5 |
| 23 | 21.0 | 21.0 | --- | --- | --- | --- | --- | --- | 6.5 | 6.5 | 14.5 | 14.0 |
| 24 | 21.0 | 21.0 | --- | --- | --- | --- | --- | --- | 6.5 | 6.5 | 14.5 | 14.0 |
| 25 | 21.0 | 21.0 | --- | --- | --- | --- | --- | --- | 7.0 | 6.5 | 14.5 | 14.0 |
| 26 | 21.0 | 21.0 | --- | --- | --- | --- | --- | --- | 7.0 | 7.0 | 14.5 | 13.5 |
| 27 | 21.0 | 21.0 | --- | --- | --- | --- | --- | --- | 7.5 | 7.0 | 14.0 | 13.5 |
| 28 | 21.0 | 20.5 | --- | --- | --- | --- | --- | --- | 7.5 | 7.5 | 14.0 | 14.0 |
| 29 | 21.0 | 20.5 | --- | --- | --- | --- | --- | --- | 8.0 | 7.5 | 14.0 | 13.5 |
| 30 | 20.5 | 20.5 | --- | --- | --- | --- | --- | --- | --- | --- | 13.5 | 13.0 |
| 31 | 20.5 | 20.5 | --- | --- | --- | --- | --- | --- | --- | --- | 13.0 | 13.0 |
| MONTH | 23.5 | 20.5 | --- | --- | --- | --- | --- | --- | --- | --- | 14.5 | 8.0 |

| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1 | 13.0 | 13.0 | 18.0 | 17.5 | 25.0 | 24.0 | 27.0 | 26.5 | 29.0 | 28.5 | 27.0 | 27.0 |
| 2 | 14.0 | 13.0 | 18.0 | 17.5 | 24.0 | 23.5 | 26.5 | 26.0 | 28.5 | 28.0 | 27.0 | 27.0 |
| 3 | 14.0 | 13.0 | 18.0 | 18.0 | 24.5 | 24.0 | 26.0 | 26.0 | 28.5 | 28.5 | 27.0 | 27.0 |
| 4 | 13.0 | 12.5 | 19.0 | 18.0 | 24.5 | 24.0 | 26.0 | 26.0 | 28.5 | 28.5 | 27.0 | 26.0 |
| 5 | 12.5 | 12.5 | 19.0 | 19.0 | 25.0 | 24.0 | 26.0 | 25.0 | 28.5 | 28.0 | 26.5 | 26.5 |
| 6 | 13.0 | 12.5 | 19.0 | 19.0 | 25.0 | 24.0 | 25.5 | 25.0 | 29.0 | 28.0 | 26.5 | 26.0 |
| 7 | 14.0 | 13.0 | 19.0 | 19.0 | 26.5 | 25.0 | 25.0 | 25.0 | 28.5 | 28.0 | 26.0 | 25.5 |
| 8 | 14.0 | 14.0 | 19.0 | 19.0 | 25.0 | 24.5 | 25.0 | 24.5 | 28.0 | 27.5 | 26.5 | 26.0 |
| 9 | 14.5 | 14.0 | 19.0 | 19.0 | 25.5 | 24.5 | 27.0 | 24.5 | 28.0 | 27.5 | 26.5 | 26.0 |
| 10 | 14.5 | 14.0 | 19.0 | 19.0 | 25.0 | 25.0 | 26.0 | 25.0 | 27.5 | 27.5 | 27.0 | 26.5 |
| 11 | 14.0 | 14.0 | 19.0 | 19.0 | 25.0 | 24.5 | 25.0 | 24.5 | 27.5 | 27.5 | 26.5 | 26.5 |
| 12 | 14.0 | 14.0 | 19.0 | 19.0 | 25.0 | 24.5 | 24.5 | 24.5 | 28.0 | 27.5 | 26.5 | 26.5 |
| 13 | 15.0 | 14.0 | 19.5 | 19.0 | 24.5 | 24.5 | 25.0 | 24.5 | 29.0 | 27.5 | 27.5 | 27.0 |
| 14 | 15.5 | 15.0 | 20.0 | 19.5 | 24.5 | 24.5 | 25.5 | 25.0 | 28.0 | 27.5 | 27.5 | 27.5 |
| 15 | 16.5 | 15.5 | 20.0 | 20.0 | 26.0 | 24.5 | 26.0 | 25.5 | --- | --- | 27.5 | 27.5 |
| 16 | 16.0 | 15.5 | 20.5 | 20.0 | 26.0 | 25.5 | 26.[illegible] | 26.0 | 27.5 | 27.5 | 28.5 | 28.0 |
| 17 | 17.0 | 16.0 | 20.5 | 20.5 | 25.5 | 25.0 | 27.0 | 26.0 | 27.5 | 27.5 | 28.5 | 28.5 |
| 18 | 17.0 | 17.0 | 20.5 | 20.5 | 25.5 | 25.0 | 26.0 | 26.0 | 28.0 | 27.5 | 28.5 | 28.0 |
| 19 | 17.0 | 17.0 | 21.5 | 20.5 | 25.5 | 25.0 | 26.0 | 26.0 | 28.0 | 27.5 | 28.5 | 28.0 |
| 20 | 17.5 | 17.0 | 22.5 | 21.5 | 26.5 | 25.5 | 26.5 | 26.0 | 28.5 | 28.0 | 28.5 | 28.5 |
| 21 | 18.0 | 17.5 | 23.0 | 22.5 | 27.0 | 26.5 | 27.0 | 26.5 | 28.5 | 28.0 | 28.5 | 28.5 |
| 22 | 18.5 | 18.0 | 23.0 | 23.0 | 27.0 | 26.5 | 27.5 | 27.0 | 28.5 | 28.0 | 28.0 | 27.0 |
| 23 | 18.5 | 18.5 | 23.0 | 22.5 | 26.5 | 25.5 | 29.0 | 27.5 | 28.5 | 28.0 | 27.0 | 27.0 |
| 24 | 19.0 | 18.5 | 23.5 | 23.0 | 26.0 | 25.5 | 29.0 | 28.0 | 28.5 | 28.0 | 27.0 | 27.0 |
| 25 | 19.0 | 19.0 | 24.0 | 23.5 | 26.0 | 25.5 | 29.0 | 29.0 | 28.0 | 28.0 | 26.5 | 26.5 |
| 26 | 19.0 | 18.0 | 24.0 | 24.0 | 26.0 | 25.5 | 29.0 | 29.0 | 28.0 | 28.0 | 26.5 | 26.0 |
| 27 | 18.0 | 18.0 | 24.0 | 24.0 | 25.5 | 25.0 | 29.5 | 29.0 | 28.5 | 28.0 | 26.0 | 26.0 |
| 28 | 18.0 | 18.0 | 24.0 | 24.0 | 26.0 | 25.5 | 29.5 | 29.0 | 28.0 | 27.5 | 26.0 | 26.0 |
| 29 | 18.0 | 17.5 | 24.0 | 24.0 | 27.0 | 26.0 | 29.5 | 29.5 | 28.0 | 27.5 | 25.5 | 25.0 |
| 30 | 18.0 | 17.5 | 24.0 | 23.5 | 27.0 | 26.5 | 29.5 | 29.0 | 27.5 | 27.0 | 25.0 | 24.0 |
| 31 | --- | --- | 24.0 | 24.0 | --- | --- | 29.0 | 29.0 | 27.5 | 27.0 | --- | --- |
| MONTH | 19.0 | 17.5 | 24.0 | 17.5 | 27.0 | 23.5 | 29.5 | 24.5 | 29.0 | 27.0 | 28.5 | 24.0 |

## 07261235 EAST FORK CADRON CREEK NORTH OF CONWAY, ARK.

LOCATION.--Lat 35°09'21", long 92°23'58", in SW¼NW¼ sec.16, T.6 N., R.13 W., Faulkner County, at bridge on U.S. Highway 65, 3.8 miles northeast of junction of U.S. Highway 65 and Interstate Highway 40.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 19 | | | | | | 27 | | 3 | | |
| NOV. 1 | | | | | | 30 | | 5 | | |
| NOV. 16 | | | | | | 30 | | 4 | | |
| DEC. 14 | | | | | | 7 | | 2 | | |
| JAN. 24 | | 200 | 100.0K | 3.2 | 1.9 | 12 | 1K | 4 | 0.600 | 0.450 |
| APR. 5 | | | | 4.0 | 5.1 | 12 | 2 | 7 | 0.200 | 0.180 |
| JULY 5 | | 2125 | 1410.0 | 8.0 | 0.9 | 25 | 5 | 6 | 0.200 | 0.090 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 19 | | | | | | 63 | 6.80 | 18.0 | | 25.0K |
| NOV. 1 | | | | | | 66 | 6.60 | 16.0 | | 35.0 |
| NOV. 16 | | | | | | 63 | 6.90 | 12.0 | | 30.0 |
| DEC. 14 | | | | | | 32 | 6.20 | | | 30.0 |
| JAN. 24 | 59 | 43 | 102 | 16 | 8.0 | 37 | 6.70 | 5.0 | 40 | 70.0 |
| APR. 5 | 65 | 51 | 116 | 34 | 10.0 | 45 | 6.80 | 11.0 | 60 | 50.0 |
| JULY 5 | 54 | 60 | 114 | 24 | 20.0 | 51 | 6.70 | 19.0 | 120 | 75.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 21 | | | | 10 | 2800 | 67 |
| NOV. 1 | 4.4 | | 2.5 | | | |
| NOV. 2 | | | | 4K | 13K | 93 |
| NOV. 16 | 5.7 | | 2.6 | 340 | 4600 | 80 |
| DEC. 13 | | | | 200 | 1800 | 220 |
| DEC. 14 | 5.0 | | 3.2 | | | |
| JAN. 24 | 8.9 | | 1.6 | | | |
| JAN. 25 | | | | 67 | 330 | 87 |
| MAR. 29 | | | | 372 | 3017 | 565 |
| APR. 5 | 8.1 | | 2.1 | | | |
| JULY 4 | | | | 170 | 3050 | 145 |
| JULY 5 | 2.0 | 21.0 | 3.2 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JULY 5 | | 2K | 100K | | 15 | 100K | | 30 | 10L |

K Less than.
L Greater than.

## 07261250 CADRON CREEK WEST OF CONWAY, ARK.

LOCATION.--Lat 35°06'53", long 92°31'20", in SW¼NW¼ sec.32, T.6 N., R.14 W., Faulkner County, 120 ft upstream from bridge on U.S. Highway 64 at county line near Conway.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 20 | 20 | | | | | | | | | |
| OCT. 21 | | | | | | 26 | | 3 | | |
| NOV. 1 | | | | | | 28 | | 4 | | |
| NOV. 2 | 34 | | | | | | | | | |
| NOV. 15 | | | | | | 27 | | 4 | | |
| NOV. 16 | 0 | | | | | | | | | |
| DEC. 14 | 2600 | | | | | 7 | | 2 | | |
| JAN. 24 | | 200 | 100.0K | 3.2 | 1.9 | 9 | 1K | 4 | 0.200 | 0.200 |
| JAN. 25 | 1290 | | | | | | | | | |
| APR. 5 | 1120 | | | 4.0 | 4.9 | 12 | 1K | 4 | 0.200 | 0.350 |
| JULY 5 | 379 | 450 | 1650.0 | 3.0 | 5.4 | 28 | 2 | 4 | 15.400 | 0.260 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 21 | | | | | | 63 | 7.00 | | | 25.0K |
| NOV. 1 | | | | | | 61 | 6.70 | 16.0 | | 40.0 |
| NOV. 15 | | | | | | 59 | 7.00 | 13.0 | | 50.0 |
| DEC. 14 | | | | | | 29 | 6.40 | 10.0 | | 90.0 |
| JAN. 24 | 53 | 16 | 69 | 16 | 8.0 | 30 | 6.60 | 6.0 | 20 | 35.0 |
| APR. 5 | 52 | 34 | 86 | 30 | 10.0 | 34 | 7.00 | 10.0 | 30 | 40.0 |
| JULY 5 | 60 | 47 | 107 | 30 | 8.0 | 56 | 6.60 | 21.0 | 80 | 55.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 21 | | | | 38 | 550 | 80 |
| NOV. 1 | 6.6 | | 1.9 | | | |
| NOV. 2 | | | | 9 | 69 | 4K |
| NOV. 15 | 7.2 | | 2.5 | | | |
| NOV. 16 | | | | 1200 | 6800 | 20 |
| DEC. 13 | | | | 300 | 4800 | 300 |
| DEC. 14 | 7.6 | | 2.5 | | | |
| JAN. 24 | 10.8 | | 1.7 | | | |
| JAN. 25 | | | | 19 | 4K | 12 |
| MAR. 29 | | | | 202 | 887 | 172 |
| APR. 5 | 9.1 | | 1.3 | | | |
| JULY 4 | | | | 57 | 3620 | 36 |
| JULY 5 | 4.4 | 49.0 | 6.0 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JULY 5 | | 2K | 200 | | 20 | 100K | | 30 | 10K |

K Less than.

## 07263620 ARKANSAS RIVER AT DAVID D. TERRY LOCK AND DAM, BELOW LITTLE ROCK, ARK.

LOCATION.--Lat 34°40'07", long 92°09'18, sec. 35, T.1 N., R.11 W., Pulaski County, at upper end of upstream wall at David D. Terry Lock and Dam, 10.3 miles downstream from Main Street bridge at Little Rock, and at mile 155.0

DRAINAGE AREA.--158,288 sq mi, of which 22,241 sq mi is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1969 to September 1972.
Water temperature: October 1969 to September 1971.

REMARKS.--Mean discharge figures are for station 07263450, 16.8 miles upstream.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | MEAN DIS-CHARGE (CFS) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | DIS-SOLVED SULFATE (SO4) (MG/L) | DIS-SOLVED CHLO-RIDE (CL) (MG/L) | DIS-SOLVED NITRATE (N) (MG/L) | DIS-SOLVED NITRITE (N) (MG/L) | DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L) | ORGANIC NITRO-GEN (N) (MG/L) | TOTAL PHOS-PHORUS (P) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | |
| 22... | 32600 | 106 | 0 | 87 | 30 | 100 | 1.0 | .00 | .02 | .32 | .14 |
| NOV. | | | | | | | | | | | |
| 05... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 30... | 12100 | 112 | 0 | 92 | 28 | 53 | .40 | .00 | -- | -- | .17 |
| JAN. | | | | | | | | | | | |
| 10... | 39900 | 82 | 0 | 67 | 23 | 56 | .79 | .00 | .00 | .05 | .10 |
| FEB. | | | | | | | | | | | |
| 09... | 17300 | 102 | 0 | 84 | 30 | 74 | .50 | .00 | .02 | .28 | .16 |
| MAR. | | | | | | | | | | | |
| 09... | 12100 | 96 | 0 | 79 | 32 | 100 | .10 | .01 | .08 | .41 | .08 |
| APR. | | | | | | | | | | | |
| 12... | 12100 | 96 | 0 | 79 | 32 | 100 | .20 | .00 | .17 | .38 | .06 |
| MAY | | | | | | | | | | | |
| 11... | 24900 | 68 | 0 | 56 | 27 | 91 | .18 | .00 | .01 | .45 | .14 |
| JUNE | | | | | | | | | | | |
| 08... | 7760 | 116 | 0 | 95 | 42 | 110 | .09 | .02 | .08 | .27 | .17 |
| JULY | | | | | | | | | | | |
| 10... | 2480 | 100 | 0 | 82 | 30 | 66 | .16 | .08 | .06 | .35 | .10 |
| AUG. | | | | | | | | | | | |
| 21... | 7290 | 140 | 0 | 115 | 64 | 200 | .02 | .02 | .00 | .12 | .15 |
| SEP. | | | | | | | | | | | |
| 29... | 19600 | 132 | 0 | 108 | 50 | 180 | .04 | .01 | .01 | .26 | .13 |

| DATE | TOTAL FILT-RABLE RESIDUE (MG/L) | TOTAL NON-FILT-RABLE RESIDUE (MG/L) | HARD-NESS (CA,MG) (MG/L) | NON-CAR-BONATE HARD-NESS (MG/L) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | COLOR (PLAT-INUM-COBALT UNITS) | CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) | BIO-CHEM-ICAL OXYGEN DEMAND (MG/L) | IMME-DIATE COLI-FORM (COL. PER 100 ML) | FECAL COLI-FORM (COL. PER 100 ML) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | |
| 22... | -- | -- | 130 | 39 | 586 | 7.4 | 20 | 10 | 1.4 | 36000 | <170 |
| NOV. | | | | | | | | | | | |
| 05... | 330 | 35 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 30... | -- | -- | 110 | 72 | 415 | 7.8 | 48 | 11 | 2.0 | -- | 6700 |
| JAN. | | | | | | | | | | | |
| 10... | -- | -- | 89 | 22 | 369 | 7.7 | 10 | 8 | 3.1 | 37000 | 2300 |
| FEB. | | | | | | | | | | | |
| 09... | -- | -- | 93 | 10 | 492 | 7.6 | 25 | 10 | 2.6 | 41000 | 6700 |
| MAR. | | | | | | | | | | | |
| 09... | -- | -- | 100 | 26 | 518 | 8.2 | 20 | 11 | 5.1 | 6800 | E110 |
| APR. | | | | | | | | | | | |
| 12... | -- | -- | 110 | 28 | 549 | 7.7 | 15 | 13 | 4.0 | 69000 | 2900 |
| MAY | | | | | | | | | | | |
| 11... | 250 | 41 | 74 | 18 | 427 | 7.6 | 40 | 11 | 5.8 | E22000 | E7000 |
| JUNE | | | | | | | | | | | |
| 08... | -- | -- | 130 | 33 | 610 | 8.2 | 25 | 21 | 2.7 | 18000 | 4800 |
| JULY | | | | | | | | | | | |
| 10... | -- | -- | 110 | 32 | 430 | 7.9 | 50 | 13 | 2.4 | 11000 | 780 |
| AUG. | | | | | | | | | | | |
| 21... | -- | -- | 180 | 60 | 1110 | 8.3 | 30 | 10 | -- | 7000 | 580 |
| SEP. | | | | | | | | | | | |
| 29... | -- | -- | 150 | 40 | 914 | 7.9 | 15 | 26 | 2.5 | 75000 | 10000 |

< LESS THAN.
E ESTIMATED.

## 07263620 ARKANSAS RIVER AT DAVID D. TERRY LOCK AND DAM, BELOW LITTLE ROCK, ARK.--continued

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREPTOCOCCI (COLONIES PER 100 ML) | ALDRIN (UG/L) | ALDRIN IN BOTTOM DEPOSITS (UG/KG) | CHLORDANE (UG/L) | CHLORDANE IN BOTTOM DEPOSITS (UG/KG) | DDD (UG/L) | DDD IN BOTTOM DEPOSITS (UG/KG) | DDE (UG/L) | DDE IN BOTTOM DEPOSITS (UG/KG) | DDT (UG/L) | DDT IN BOTTOM DEPOSITS (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 22... | 290 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV. 05... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 30... | 500 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN. 10... | 440 | .00 | <.2 | .0 | 5 | .00 | 7.7 | .00 | 5.3 | .00 | 2.7 |
| FEB. 09... | E650 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR. 09... | E20 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR. 12... | 120 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY 11... | 108 | .00 | <.2 | .0 | <1 | .00 | <.2 | .00 | <.2 | .00 | <.2 |
| JUNE 08... | E6 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JULY 10... | 130 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG. 21... | 4 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP. 29... | 320 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | DIELDRIN (UG/L) | DIELDRIN IN BOTTOM DEPOSITS (UG/KG) | ENDRIN (UG/L) | ENDRIN IN BOTTOM DEPOSITS (UG/KG) | HEPTACHLOR (UG/L) | HEPTACHLOR IN BOTTOM DEPOSITS (UG/KG) | HEPTACHLOR EPOXIDE (UG/L) | HEPTACHLOR EPOXIDE IN BOTTOM DEPOSITS (UG/KG) | LINDANE (UG/L) | LINDANE IN BOTTOM DEPOSITS (UG/KG) | MALATHION IN BOTTOM DEPOSITS (UG/KG) | METHYL PARATHION IN BOTTOM DEPOSITS (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 22... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV. 05... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN. 10... | .00 | <.2 | .00 | <.2 | .00 | <.2 | .00 | <.2 | .00 | <.2 | <.2 | <.2 |
| MAY 11... | .00 | <.2 | .00 | <.2 | .00 | <.2 | .00 | <.2 | .00 | <.2 | -- | -- |

| DATE | PARATHION IN BOTTOM DEPOSITS (UG/KG) | 2,4-D (UG/L) | 2,4-D IN BOTTOM DEPOSITS (UG/KG) | 2,4,5-T (UG/L) | 2,4,5-T IN BOTTOM DEPOSITS (UG/KG) | SILVEX (UG/L) | SILVEX IN BOTTOM DEPOSITS (UG/KG) | TOTAL MERCURY (HG) (UG/L) | DISSOLVED GROSS ALPHA AS U-NAT. (PC/L) | DISSOLVED GROSS ALPHA AS U-NAT. (UG/L) | SUSPENDED GROSS ALPHA AS U-NAT. (PC/L) | SUSPENDED GROSS ALPHA AS U-NAT. (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 22... | -- | -- | -- | -- | -- | -- | -- | .5 | -- | -- | -- | -- |
| NOV. 05... | -- | -- | -- | -- | -- | -- | -- | -- | 2.0 | 6.1 | .7 | 2.0 |
| JAN. 10... | <.2 | .00 | <.7 | .01 | <.2 | .00 | <.2 | -- | -- | -- | -- | -- |
| MAY 11... | -- | .04 | <.8 | .02 | <.2 | .00 | <.2 | -- | <.9 | <2.7 | .7 | 2.1 |

| DATE | DISSOLVED GROSS BETA AS CS-137 (PC/L) | SUSPENDED GROSS BETA AS CS-137 (PC/L) | DISSOLVED GROSS BETA AS SR90 /Y90 (PC/L) | SUSPENDED GROSS BETA AS SR90 /Y90 (PC/L) | DISSOLVED RA-226 (RADON METHOD) (PC/L) | DISSOLVED NATURAL URANIUM (U) (UG/L) |
|---|---|---|---|---|---|---|
| NOV. 05... | 8.7 | 3.8 | 6.9 | 3.3 | .07 | 1.0 |
| MAY 11... | 5.6 | 3.6 | 6.5 | 3.1 | .06 | .4 |

< LESS THAN.
E ESTIMATED.

## 07263620 ARKANSAS RIVER AT DAVID D. TERRY LOCK AND DAM, BELOW LITTLE ROCK, ARK.--continued

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

### FIELD ANALYSES

| DATE | MEAN DIS-CHARGE (CFS) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | DIS-SOLVED OXYGEN (MG/L) | PER-CENT SATUR-ATION |
|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | |
| 22... | 32600 | 104 | 0 | 85 | 600 | 7.3 | 22.0 | 7.2 | 81 |
| NOV. | | | | | | | | | |
| 30... | 12100 | 106 | 0 | 87 | 613 | 7.6 | 9.0 | 10.5 | 90 |
| JAN. | | | | | | | | | |
| 10... | 39900 | 78 | 0 | 64 | 400 | 8.0 | 8.0 | 10.6 | 89 |
| FEB. | | | | | | | | | |
| 09... | 17300 | 96 | 0 | 79 | 685 | 7.6 | 5.5 | 12.5 | 99 |
| MAR. | | | | | | | | | |
| 09... | 12100 | 96 | 0 | 79 | 580 | 8.0 | 11.0 | 10.7 | 97 |
| APR. | | | | | | | | | |
| 12... | 12100 | 96 | 0 | 79 | 588 | 8.1 | 18.0 | 8.3 | 86 |
| MAY | | | | | | | | | |
| 11... | 24900 | 68 | 0 | 56 | 418 | 7.7 | 17.5 | 7.7 | 80 |
| JUNE | | | | | | | | | |
| 08... | 7760 | 116 | 0 | 95 | 611 | 8.2 | 28.0 | 7.2 | 91 |
| JULY | | | | | | | | | |
| 10... | 2680 | 100 | 0 | 82 | 665 | 7.9 | 27.0 | 5.8 | 72 |
| AUG. | | | | | | | | | |
| 21... | 7290 | 130 | 4 | 113 | 1080 | 8.4 | 30.5 | 6.9 | 91 |
| SEP. | | | | | | | | | |
| 29... | 19600 | 132 | 0 | 108 | 915 | 7.7 | 26.0 | 5.5 | 67 |

ARKANSAS RIVER BASIN

## 07264000 BAYOU METO NEAR LONOKE, ARK.

LOCATION.--Lat 34°44'10", long 91°54'58", in SW¼ sec.6, T.1 N., R.8 W., Lonoke County, at gaging station near left bank on downstream side of bridge on State Highway 31, 3 miles upstream from Brushy Slough, 3.5 miles south of Lonoke, and at mile 106.9.

DRAINAGE AREA.--207 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1972.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | MEAN DIS-CHARGE (CFS) | DIS-SOLVED SILICA (SIO2) (MG/L) | DIS-SOLVED IRON (FE) (UG/L) | DIS-SOLVED MAN-GANESE (MN) (UG/L) | DIS-SOLVED SODIUM (NA) (MG/L) | DIS-SOLVED PO-TAS-SIUM (K) (MG/L) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | DIS-SOLVED SULFATE (SO4) (MG/L) | DIS-SOLVED CHLO-RIDE (CL) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | |
| 21... | 7.7 | 8.0 | 60 | 160 | 20 | 5.1 | 126 | 0 | 103 | 9.0 | 26 |
| DEC. | | | | | | | | | | | |
| 08... | 116 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN. | | | | | | | | | | | |
| 19... | 106 | -- | 100 | 30 | -- | -- | 36 | 0 | 30 | -- | -- |
| FEB. | | | | | | | | | | | |
| 29... | 61 | -- | -- | -- | -- | -- | 52 | 0 | 43 | -- | -- |
| MAR. | | | | | | | | | | | |
| 29... | 106 | -- | -- | -- | -- | -- | 50 | 0 | 41 | -- | -- |
| APR. | | | | | | | | | | | |
| 26... | 76 | 6.2 | 70 | 90 | 30 | 3.8 | 80 | 0 | 66 | 9.6 | 62 |
| JUNE | | | | | | | | | | | |
| 07... | 7.7 | -- | -- | -- | -- | -- | 190 | 0 | 160 | -- | -- |
| JULY | | | | | | | | | | | |
| 19... | 8.9 | -- | 10 | 10 | -- | -- | 192 | 0 | 160 | -- | -- |
| AUG. | | | | | | | | | | | |
| 30... | 33 | -- | -- | -- | -- | -- | 130 | 0 | 213 | -- | -- |
| SEP. | | | | | | | | | | | |
| 28... | 66 | -- | -- | -- | -- | -- | 118 | 0 | 97 | -- | -- |

| DATE | DIS-SOLVED NITRATE (N) (MG/L) | DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L) | ORGANIC NITRO-GEN (N) (MG/L) | TOTAL PHOS-PHORUS (P) (MG/L) | TOTAL FILT-RABLE RESIDUE (MG/L) | TOTAL NON-FILT-RABLE RESIDUE (MG/L) | HARD-NESS (CA,MG) (MG/L) | NON-CAR-BONATE HARD-NESS (MG/L) | PERCENT SODIUM | SODIUM AD-SORP-TION RATIO | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | |
| 21... | .60 | .02 | 1.3 | .19 | -- | -- | 100 | 0 | 29 | .9 | 306 |
| DEC. | | | | | | | | | | | |
| 08... | -- | 2.4 | .05 | 1.6 | -- | -- | -- | -- | -- | -- | 322 |
| JAN. | | | | | | | | | | | |
| 19... | -- | .36 | .50 | .25 | 120 | 21 | -- | -- | -- | -- | 192 |
| FEB. | | | | | | | | | | | |
| 29... | .70 | .05 | .05 | .26 | -- | -- | -- | -- | -- | -- | 636 |
| MAR. | | | | | | | | | | | |
| 29... | .47 | .06 | .51 | .36 | -- | -- | -- | -- | -- | -- | 275 |
| APR. | | | | | | | | | | | |
| 26... | 1.1 | .05 | .77 | .26 | -- | -- | 78 | 12 | 50 | 1.0 | 350 |
| JUNE | | | | | | | | | | | |
| 07... | 1.6 | .07 | 2.0 | .23 | -- | -- | -- | -- | -- | -- | 414 |
| JULY | | | | | | | | | | | |
| 19... | 1.2 | .22 | 1.0 | .45 | 360 | 78 | -- | -- | -- | -- | 572 |
| AUG. | | | | | | | | | | | |
| 30... | .50 | -- | -- | .31 | -- | -- | -- | -- | -- | -- | 655 |
| SEP. | | | | | | | | | | | |
| 28... | .95 | .06 | .61 | .30 | -- | -- | -- | -- | -- | -- | 683 |

| DATE | PH (UNITS) | TEMPER-ATURE (DEG C) | COLOR (PLAT-INUM-COBALT UNITS) | TUR-BID-ITY (MG/L) | CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) | CHEM-ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) | BIO-CHEM-ICAL OXYGEN DEMAND (MG/L) | IMME-DIATE COLI-FORM (COL. PER 100 ML) | FECAL COLI-FORM (COL. PER 100 ML) | STREP-TOCOCCI (COL-ONIES PER 100 ML) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | |
| 21... | 7.4 | -- | 25 | 46 | 46 | -- | 2.0 | -- | -- | -- |
| DEC. | | | | | | | | | | |
| 08... | 6.7 | -- | 100 | 55 | 30 | -- | 3.9 | 3000 | 640 | 1400 |
| JAN. | | | | | | | | | | |
| 19... | 7.1 | -- | 35 | 25 | 20 | -- | 2.6 | 600 | 150 | E150 |
| FEB. | | | | | | | | | | |
| 29... | 6.9 | -- | 20 | 40 | 23 | -- | 7.1 | E300 | 170 | 110 |
| MAR. | | | | | | | | | | |
| 29... | 7.3 | -- | 45 | 80 | 33 | -- | 3.4 | 2000 | 580 | 760 |
| APR. | | | | | | | | | | |
| 26... | 7.5 | -- | 15 | 35 | 23 | -- | 8.2 | 4500 | 1000 | 1700 |
| JUNE | | | | | | | | | | |
| 07... | 7.1 | -- | 20 | 40 | -- | 50 | 7.0 | 1200 | E200 | E100 |
| JULY | | | | | | | | | | |
| 19... | 7.2 | -- | 10 | 55 | -- | 58 | 7.0 | 1400 | 400 | 400 |
| AUG. | | | | | | | | | | |
| 30... | 7.5 | -- | 10 | 30 | 27 | -- | 5.3 | 2400 | >1200 | -- |
| SEP. | | | | | | | | | | |
| 28... | 7.7 | -- | 10 | 70 | 30 | -- | 6.0 | 3100 | E2600 | 700 |

> GREATER THAN.
E ESTIMATED.

07264000 BAYOU METO NEAR LONOKE, ARK.--continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | ALDRIN (UG/L) | ALDRIN IN BOTTOM DE-POSITS (UG/KG) | CHLOR-DANE (UG/L) | CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG) | DDD (UG/L) | DDD IN BOTTOM DE-POSITS (UG/KG) | DDE (UG/L) | DDE IN BOTTOM DE-POSITS (UG/KG) | DDT (UG/L) | DDT IN BOTTOM DE-POSITS (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT.<br>21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC.<br>08... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN.<br>19... | .00 | <.2 | .0 | <1 | .00 | 8.0 | .00 | 6.3 | .00 | 3.0 |
| FEB.<br>29... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR.<br>29... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR.<br>26... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUNE<br>07... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JULY<br>19... | .00 | <.2 | .0 | <1 | .00 | 29 | .01 | 19 | .00 | 3.9 |
| AUG.<br>30... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP.<br>20... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | DI-ELDRIN (UG/L) | DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG) | ENDRIN (UG/L) | ENDRIN IN BOTTOM DE-POSITS (UG/KG) | HEPTA-CHLOR (UG/L) | HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG) | HEPTA-CHLOR EPOXIDE (UG/L) | HEPTA-CHLOR EPOXIDE IN BOT-TOM DE-POSITS (UG/KG) | LINDANE (UG/L) | LINDANE IN BOTTOM DE-POSITS (UG/KG) | MALA-THION IN BOTTOM DE-POSITS (UG/KG) | METHYL PARA-THION IN BOT-TOM DE-POSITS (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT.<br>21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN.<br>19... | .00 | <.2 | .00 | <.2 | .00 | <.2 | .00 | <.2 | .00 | <.2 | <.2 | <.2 |
| APR.<br>26... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JULY<br>19... | .01 | <.2 | .01 | <.2 | .00 | <.2 | .00 | <.2 | .00 | <.2 | -- | -- |

| DATE | PARA-THION IN BOTTOM DE-POSITS (UG/KG) | 2,4-D (UG/L) | 2,4-D IN BOTTOM DE-POSITS (UG/KG) | 2,4,5-T (UG/L) | 2,4,5-T IN BOTTOM DE-POSITS (UG/KG) | SILVEX (UG/L) | SILVEX IN BOTTOM DE-POSITS (UG/KG) | DIS-SOLVED ARSENIC (AS) (UG/L) | DIS-SOLVED CAD-MIUM (CD) (UG/L) | HEXA-VALENT CHRO-MIUM (CR6) (UG/L) | DIS-SOLVED COBALT (CO) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT.<br>21... | -- | -- | -- | -- | -- | -- | -- | 10 | 0 | <10 | 0 |
| JAN.<br>19... | <.2 | .00 | <1.0 | .01 | <.3 | .00 | <.3 | <10 | 0 | <10 | 1 |
| APR.<br>26... | -- | -- | -- | -- | -- | -- | -- | <10 | 0 | <10 | 0 |
| JULY<br>19... | -- | .00 | <3.1 | .16 | <.8 | .07 | <1.0 | <10 | 0 | <10 | 0 |

< LESS THAN.

## 07264000 BAYOU METO NEAR LONOKE, ARK.--continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DIS-SOLVED COPPER (CU) (UG/L) | DIS-SOLVED LEAD (PB) (UG/L) | DIS-SOLVED LITHIUM (LI) (UG/L) | DIS-SOLVED MERCURY (HG) (UG/L) | DIS-SOLVED NICKEL (NI) (UG/L) | DIS-SOLVED SILVER (AG) (UG/L) | DIS-SOLVED ZINC (ZN) (UG/L) | DIS-SOLVED GROSS ALPHA AS U-NAT. (PC/L) | DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L) | SUS-PENDED GROSS ALPHA AS U-NAT. (PC/L) | SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | |
| 21... | 5 | 1 | 0 | 1.6 | 2 | 1 | 20 | -- | -- | -- | -- |
| JAN. | | | | | | | | | | | |
| 19... | 6 | 0 | -- | .5 | 3 | 0 | 20 | .5 | 1.6 | .3 | 1.0 |
| APR. | | | | | | | | | | | |
| 26... | 9 | 0 | -- | <.5 | 1 | -- | 60 | -- | -- | -- | -- |
| JULY | | | | | | | | | | | |
| 19... | 4 | 1 | -- | <.5 | 2 | -- | 0 | 2.3 | 6.9 | 1.9 | 5.7 |

| DATE | DIS-SOLVED GROSS BETA AS CS-137 (PC/L) | SUS-PENDED GROSS BETA AS CS-137 (PC/L) | DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L) | SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L) | DIS-SOLVED RA-226 (RADON METHOD) (PC/L) | DIS-SOLVED URANIUM (U) (UG/L) |
|---|---|---|---|---|---|---|
| JAN. | | | | | | |
| 19... | 5.2 | 1.6 | 4.1 | 1.4 | [illegible] | .01 |
| JULY | | | | | | |
| 19... | 7.6 | 4.7 | 6.2 | 4.0 | .07 | 1.3 |

## FIELD ANALYSES

| DATE | MEAN DIS-CHARGE (CFS) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | DIS-SOLVED OXYGEN (MG/L) | PER-CENT SATUR-ATION |
|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | |
| 21... | 7.7 | -- | -- | -- | 295 | 7.7 | 21.0 | 6.2 | 69 |
| DEC. | | | | | | | | | |
| 08... | 114 | -- | -- | -- | 337 | 7.3 | 9.5 | 8.3 | 72 |
| JAN. | | | | | | | | | |
| 19... | 106 | -- | -- | -- | 192 | 7.4 | 8.5 | 6.8 | 58 |
| FEB. | | | | | | | | | |
| 29... | 61 | -- | -- | -- | 439 | 7.2 | 13.7 | 8.8 | 85 |
| MAR. | | | | | | | | | |
| 29... | 186 | 54 | 0 | 44 | 277 | 7.4 | 13.0 | 8.4 | 79 |
| APR. | | | | | | | | | |
| 26... | 74 | 68 | 0 | 56 | 353 | 7.2 | 17.0 | 7.9 | 81 |
| JUNE | | | | | | | | | |
| 07... | 7.7 | 188 | 0 | 154 | 414 | 7.7 | 28.0 | 4.8 | 62 |
| JULY | | | | | | | | | |
| 19... | 8.9 | 188 | 0 | 154 | 554 | 8.8 | 28.5 | 5.2 | 67 |
| AUG. | | | | | | | | | |
| 30... | 33 | 136 | 0 | 112 | 638 | 7.5 | 26.0 | 4.3 | 52 |
| SEP. | | | | | | | | | |
| 28... | 46 | 120 | 0 | 98 | 478 | 7.6 | 25.0 | 4.9 | 59 |

< LESS THAN.

## 07264500 BAYOU METO NEAR STUTTGART, ARK.

LOCATION.--Lat 34°27'15", long 91°36'58", in SE¼SE¼ sec.11, T.3 S., R.6 W., Arkansas County, at bridge on U.S. Highway 79, 5.5 miles southwest of Stuttgart, 8.0 miles upstream from Crooked Creek.

DRAINAGE AREA.--574 sq mi.

PERIOD OF RECORD.--Chemical analyses: November 1949 to September 1952, October 1968 to September 1972. Water temperatures: November 1949 to September 1952.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 25 | 0 | | | | | 89 | | 13 | | |
| NOV. 10 | 0 | | | | | 51 | | 15 | | |
| NOV. 22 | 0 | | | | | 88 | | 14 | | |
| DEC. 8 | 0 | | | | | 37 | | 16 | | |
| DEC. 20 | 1060 | | | 6.0 | 3.9 | 15 | 18 | 5 | 0.300 | 0.800 |
| JAN. 12 | 1560 | | | | | 20 | | 9 | | |
| JAN. 24 | 722 | | | | | 112 | | 12 | | |
| FEB. 8 | | | | | | 30 | | 15 | | |
| FEB. 9 | 263 | | | | | | | | | |
| FEB. 21 | 170 | | | | | | | | | |
| FEB. 22 | | | | | | 38 | | 21 | | |
| MAR. 9 | 705 | | | | | 34 | | 17 | | |
| MAR. 21 | 263 | | | 5.6 | 4.4 | 42 | 2 | 20 | 0.200 | 0.180 |
| APR. 12 | 255 | | | | | 30 | | 22 | | |
| APR. 26 | 50 | | | | | 43 | | 23 | | |
| MAY 10 | 940 | | | | | 22 | | 12 | | |
| MAY 22 | 250 | | | | | | | | | |
| MAY 23 | | | | | | 69 | | 103 | | |
| JUNE 14 | 0 | | | | | 65 | | 25 | | |
| JUNE 27 | 0 | 1400 | 2430.0 | 24.0 | 6.3 | 71 | 16 | 31 | 0.100K | 1.980 |
| JULY 12 | 40 | | | | | 87 | | 44 | | |
| JULY 26 | 0 | | | | | 59 | | 24 | | |
| AUG. 9 | 65 | | | | | 78 | | 22 | | |
| AUG. 23 | 20 | | | | | 102 | | 23 | | |
| SEP. 13 | 130 | | | | | 74 | | 8 | | |
| SEP. 26 | 30 | 960 | 180.0 | 29.0 | | 42 | 10 | 35 | 0.210 | 0.080 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 25 | | | | | | 212 | 7.90 | 24.0 | | 90.0 |
| NOV. 10 | | | | | | 235 | 7.50 | 11.0 | | 60.0 |
| NOV. 22 | | | | | | 143 | 8.10 | 8.0 | | 25.0 |
| DEC. 8 | | | | | | 135 | 6.50 | 9.0 | | 30.0 |
| DEC. 20 | 127 | 4 | 131 | 26 | 10.0 | 50 | 6.60 | 11.0 | 120 | 35.0 |
| JAN. 12 | | | | | | 52 | 7.00 | 11.0 | | 60.0 |
| JAN. 24 | | | | | | 84 | 7.80 | 11.0 | | 55.0 |
| FEB. 8 | | | | | | 89 | 7.10 | 6.0 | | 45.0 |
| FEB. 22 | | | | | | 158 | 6.40 | 10.0 | | 65.0 |
| MAR. 9 | | | | | | 119 | 7.40 | 11.0 | | 100.0 |
| MAR. 21 | 116 | 52 | 168 | 42 | 24.0 | 117 | 7.10 | 19.0 | 80 | 70.0 |
| APR. 12 | | | | | | 161 | 7.30 | 21.0 | | 80.0 |
| APR. 26 | | | | | | 156 | 7.00 | 20.0 | | 90.0 |
| MAY 10 | | | | | | 83 | 6.80 | 18.0 | | 80.0 |
| MAY 23 | | | | | | 116 | 7.40 | 25.0 | | 75.0 |
| JUNE 14 | | | | | | 220 | 7.60 | 29.0 | | 120.0 |
| JUNE 27 | 165 | 60 | 225 | 86 | 60.0 | 238 | | 33.0 | 70 | 25.0K |
| JULY 12 | | | | | | 299 | | 31.0 | | 120.0 |
| JULY 26 | | | | | | 235 | 7.60 | 36.0 | | 110.0 |
| AUG. 9 | | | | | | 200 | 6.80 | 28.0 | | 40.0 |
| AUG. 23 | | | | | | 268 | 7.80 | 31.0 | | 95.0 |
| SEP. 13 | | | | | | 285 | 7.20 | 29.0 | | 205.0 |
| SEP. 26 | 177 | 36 | 213 | 106 | 62.0 | 319 | 7.60 | 29.0 | 50 | 32.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 25 | 7.6 | | 7.2 | | | |
| NOV. 10 | 9.2 | | 2.3 | | | |
| NOV. 22 | 13.0 | | 3.4 | | | |
| DEC. 8 | 7.9 | | 4.6 | | | |
| DEC. 20 | 6.0 | | 3.3 | 53 | 120 | 433 |
| JAN. 12 | 8.9 | | 2.8 | | | |
| JAN. 24 | 8.2 | | 6.5 | | | |
| FEB. 8 | 11.1 | | 5.0 | | | |
| FEB. 22 | 10.6 | | 3.6 | | | |
| MAR. 9 | 9.2 | | 3.9 | | | |
| MAR. 21 | 8.1 | | 3.2 | 35 | 660 | 0 |
| APR. 12 | 7.3 | | 3.4 | | | |
| APR. 26 | 7.5 | | 3.6 | | | |
| MAY 10 | 6.2 | | 4.3 | | | |
| MAY 23 | 7.3 | | 7.3 | | | |
| JUNE 14 | 6.7 | | 6.7 | | | |
| JUNE 27 | 13.1 | | 13.0L | 110 | 4400 | 25 |
| JULY 12 | 9.3 | 124.0 | 5.7 | | | |
| JULY 26 | 7.2 | 103.0 | 4.6 | | | |
| AUG. 9 | 6.9 | 87.0 | 2.8 | | | |
| AUG. 23 | 6.9 | 92.0 | 4.1 | | | |
| SEP. 13 | 5.8 | 74.0 | 2.8 | | | |
| SEP. 26 | 8.2 | 105.0 | 4.8 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JUNE 27 | | 3K | 100K | | 10K | 100K | 2.0 | 30K | 16 |
| SEP. 26 | 10K | 2K | | | 3 | 100 | 0.1K | 50K | 11 |

K Less than.
L Greater than.

## 07265283 ARKANSAS RIVER AT DAM NO. 2, NEAR GILLETT, ARK.

LOCATION.--Lat 33°58'18", long 91°18'59", in sec.20, T.8 S., R.3 W., Arkansas County, 2 miles downstream from Arkansas Post Canal, and 9.8 miles southeast of Gillett.

DRAINAGE AREA.--160,475 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1969 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGANESE MN UG/L | CALCIUM CA,DISS MG/L | MAGNESIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 25 | 94100 | | | | | 89 | | 87 | | |
| NOV. 9 | 14100 | | | | | 84 | | 99 | | |
| NOV. 22 | 17600 | | | | | 70 | | 69 | | |
| DEC. 7 | 12300 | | | | | 96 | | 19 | | |
| DEC. 20 | 164000 | | | 20.0 | 4.9 | 45 | 7 | 89 | 0.200 | 0.600 |
| JAN. 12 | 46000 | | | | | 58 | | 44 | | |
| JAN. 24 | 22900 | | | | | 56 | | 44 | | |
| FEB. 8 | | | | | | 60 | | 54 | | |
| FEB. 9 | 19600 | | | | | | | | | |
| FEB. 21 | 7200 | | | | | 81 | | 94 | | |
| MAR. 7 | 14200 | | | | | 81 | | 92 | | |
| MAR. 21 | 15900 | | | 31.2 | 7.3 | 77 | 21 | 92 | 0.100 | 0.100 |
| MAR. 25 | 49800 | | | | | | | | | |
| APR. 11 | 5800 | | | | | 75 | | 94 | | |
| APR. 25 | | | | | | 76 | | 110 | | |
| MAY 10 | 12900 | | | | | 61 | | 83 | | |
| MAY 22 | | | | | | 32 | | 109 | | |
| MAY 23 | 12100 | | | | | | | | | |
| JUNE 14 | 9000 | | | | | 90 | | 122 | | |
| JUNE 28 | 16200 | 250 | 50.0K | 44.0 | 6.3 | 90 | 50 | 109 | 0.100K | 2.900 |
| JULY 12 | 16200 | | | | | 47 | | 80 | | |
| JULY 26 | 14400 | 400 | 160.0 | | | 56 | | 91 | | |
| AUG. 9 | 19600 | | | | | 56 | | 170 | | |
| AUG. 23 | 7000 | | | | | 110 | | 13 | | |
| SEP. 13 | 12600 | | | | | 112 | | 33 | | |
| SEP. 26 | 1600 | 170 | 70.0 | 44.0 | | 60 | 9 | 109 | 0.330 | 0.060 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 25 | | | | | | 606 | 8.30 | 21.0 | | 75.0 |
| NOV. 9 | | | | | | 500 | 8.20 | 15.0 | | 30.0 |
| NOV. 22 | | | | | | 303 | 8.10 | 12.0 | | 120.0 |
| DEC. 7 | | | | | | 357 | 8.00 | 9.0 | | 350.0 |
| DEC. 20 | 275 | 89 | 362 | 72 | 52.0 | 400 | 7.70 | 11.0 | 60 | 130.0 |
| JAN. 12 | | | | | | 290 | 7.70 | 10.0 | | 60.0 |
| JAN. 24 | | | | | | 212 | 7.30 | 13.0 | | 25.0K |
| FEB. 8 | | | | | | 290 | 7.70 | 8.0 | | 25.0 |
| FEB. 21 | | | | | | 500 | 8.20 | 8.0 | | 45.0 |
| MAR. 7 | | | | | | 670 | 9.00 | 12.0 | | 35.0 |
| MAR. 21 | 296 | 16 | 310 | 100 | 70.0 | 400 | 7.60 | 15.0 | 30 | 25.0K |
| APR. 11 | | | | | | 571 | 8.30 | 19.0 | | 55.0 |
| APR. 25 | | | | | | 513 | 7.60 | 19.0 | | 55.0 |
| MAY 10 | | | | | | 360 | 7.30 | 19.0 | | 120.0 |
| MAY 22 | | | | | | 512 | 6.00 | 20.0 | | 155.0 |
| JUNE 14 | | | | | | 602 | 8.00 | 29.0 | | 25.0K |
| JUNE 28 | 350 | 40 | 300 | 136 | 110.0 | 606 | | 28.0 | 60 | 25.0K |
| JULY 12 | | | | | | 467 | | 29.0 | | 25.0K |
| JULY 26 | | | | | | 660 | 8.20 | 31.0 | | 40.0 |
| AUG. 9 | | | | | | 660 | 7.10 | 30.0 | | 47.0 |
| AUG. 23 | | | | | | 296 | 7.00 | 29.0 | | 11.0 |
| SEP. 13 | | | | | | 537 | 7.90 | 29.0 | | 400.0L |
| SEP. 26 | 502 | 12 | 514 | 164 | 116.0 | 910 | 8.00 | 27.0 | 20 | 10.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 25 | 7.9 | | 7.7 | | | |
| NOV. 9 | 9.4 | | 1.2 | | | |
| NOV. 22 | 9.6 | | 9.0 | | | |
| DEC. 7 | 10.9 | | 10.2 | | | |
| DEC. 20 | 132.0 | | 2.1 | 23 | 2000 | 700 |
| JAN. 12 | 11.3 | | 2.1 | | | |
| JAN. 24 | 11.2 | | 6.4 | | | |
| FEB. 8 | 12.5 | | 5.1 | | | |
| FEB. 21 | 13.0 | | 12.7 | | | |
| MAR. 7 | 11.4 | | 5.6 | | | |
| MAR. 21 | 7.9 | | 2.0 | 0 | 5 | 3 |
| APR. 11 | 8.5 | | 3.5L | | | |
| APR. 25 | 6.6 | | 2.4 | | | |
| MAY 10 | 8.3 | | 7.6 | | | |
| MAY 22 | 6.3 | | 4.0 | | | |
| JUNE 14 | 6.5 | | 2.2 | | | |
| JUNE 27 | | | | 32 | 270 | 26 |
| JUNE 28 | 5.6 | | 1.5 | | | |
| JULY 12 | 6.7 | 117.0 | 4.5 | | | |
| JULY 26 | 6.4 | 112.0 | 2.0 | | | |
| AUG. 9 | 6.0 | 89.0 | 5.0L | | | |
| AUG. 23 | 6.7 | 110.0 | 5.0 | | | |
| SEP. 13 | 6.3 | 80.0 | 5.3L | | | |
| SEP. 26 | 6.5 | 81.0 | 2.2 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JUNE 28 | | 2K | 100K | | 120 | 100K | 2.0K | 60 | 62 |
| JULY 26 | | 2K | 100 | | 10K | 80K | 0.05K | 30 | |
| SEP. 26 | 10K | 2K | 50K | | 260 | 100K | 0.3K | 90 | 66 |

K Less than.
L Greater than.

## 07265455 MISSISSIPPI RIVER NEAR GREENVILLE, MISS.

LOCATION.--Lat 33°17'33", long 91°09'38", in sec.24, T.16 S., R.1 W., Chicot County, at Corps of Engineers gaging station at bridge on U.S. Highway 82, 7.2 miles southwest of Greenville.

DRAINAGE AREA.--1,130,700 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | 252000 | | | | | 110 | | 35 | | |
| DEC. 14 | 700000 | 1600 | 30.0K | 33.6 | 12.6 | 80 | 80 | 31 | 1.500 | 0.800 |
| JAN. 25 | 663000 | | | | | 89 | | 16 | | |
| FEB. 22 | 440000 | | | | | 57 | | 17 | | |
| MAR. 14 | 912000 | | | 32.8 | 9.7 | 79 | 40 | 16 | 1.200 | 0.180 |
| APR. 25 | 1312000 | | | | | 82 | | 24 | | |
| MAY 23 | 892000 | | | | | 58 | | 15 | | |
| JUNE 20 | 622000 | 470 | 140.0 | 53.6 | 14.8 | 135 | 80 | 19 | 2.500 | 0.800 |
| JULY 25 | 346000 | | | | | 92 | | 17 | | |
| AUG. 22 | 381000 | | | | | 121 | | 17 | | |
| SEP. 19 | 296000 | 2210 | 340.0 | 45.0 | | 123 | 10 | 20 | 2.120 | 0.090 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | | | | | | 416 | 7.90 | 10.0 | | 105.0 |
| DEC. 14 | 248 | 580 | 828 | 136 | 84.0 | 256 | 7.70 | 12.0 | 60 | 400.0 |
| JAN. 25 | | | | | | 238 | 7.70 | 7.0 | | 120.0 |
| FEB. 22 | | | | | | 303 | 8.10 | 6.0 | | 7.5 |
| MAR. 14 | 190 | 220 | 418 | 122 | 82.0 | 234 | 8.00 | 11.0 | 40 | 180.0 |
| APR. 25 | | | | | | 273 | 7.60 | 18.0 | | 230.0 |
| MAY 23 | | | | | | 293 | 7.60 | 24.0 | | 25.0K |
| JUNE 20 | 93 | 268 | 361 | 194 | 134.0 | 323 | 7.60 | 29.0 | 20 | 95.0 |
| JULY 25 | | | | | | 335 | 8.00 | 32.0 | | 55.0 |
| AUG. 22 | | | | | | 407 | 8.10 | 30.0 | | 155.0 |
| SEP. 19 | | | | 180 | 112.0 | 444 | 8.00 | 28.0 | | 90.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 26 | 7.7 | | 1.5 | | | |
| DEC. 14 | 8.6 | | 2.4 | 1300 | 16000 | 1400 |
| JAN. 25 | 12.0 | | 2.4 | | | |
| FEB. 22 | 12.1 | | 2.5 | | | |
| MAR. 14 | 9.9 | | 1.8 | | | |
| APR. 25 | 7.7 | | 1.4 | | | |
| MAY 23 | 6.6 | | 1.2 | | | |
| JUNE 20 | 7.3 | | 1.2 | 450 | 5060 | 19 |
| JULY 25 | 7.5 | 101.0 | 1.4 | | | |
| AUG. 22 | 6.8 | 89.0 | 0.6 | | | |
| SEP. 19 | 7.1 | 90.0 | 1.2 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JUNE 20 | | 2 | 100K | | 15 | 100 | 2.0K | 30K | 40 |
| SEP. 19 | | | 50K | | 85 | | | 70 | |

K Less than.

## 07338720 MOUNTAIN FORK NEAR HATFIELD, ARK.

LOCATION.--Lat 34°30'12", long 94°25'50", in NE¼NE¼ sec.17, T.3 S., R.32 W., Polk County, at bridge on State Highway 246, 3.1 miles northeast of Hatfield.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 27 | | | | | | 9 | | 2 | | |
| OCT. 28 | 100 | | | | | | | | | |
| NOV. 8 | 86 | | | | | 13 | | 2 | | |
| NOV. 17 | 76 | | | | | 10 | | 2 | | |
| DEC. 7 | | 700 | 100.0K | 5.6 | 5.3 | 6 | 2 | 2 | 0.100K | 0.100 |
| DEC. 21 | 210 | | | | | 4 | | 2 | | |
| JAN. 10 | | | | | | 7 | | 3 | | |
| JAN. 26 | 100 | | | | | 17 | | 6 | | |
| FEB. 16 | 76 | | | | | 8 | | 3 | | |
| MAR. 7 | 86 | | | 2.4 | 3.4 | 11 | 5 | 3 | | 0.130 |
| APR. 12 | 76 | | | | | 13 | | 5 | | |
| MAY 6 | 56 | | | | | | | | | |
| MAY 8 | | | | | | 15 | | 2 | | |
| MAY 17 | | | | | | 10 | | 1 | | |
| JUNE 12 | 14 | | | | | | | | | |
| JUNE 13 | | 600 | 100.0 | 5.0 | 5.0 | 16 | 7 | 3 | 0.400 | 0.010K |
| JULY 10 | 8 | | | | | 18 | | 5 | | |
| JULY 24 | 1 | | | | | 20 | | 6 | | |
| AUG. 7 | 2 | | | | | | | 6 | | |
| AUG. 14 | 1 | | | | | 20 | | 6 | | |
| SEP. 18 | 47 | | | | | 23 | | 5 | | |
| SEP. 25 | 2 | 660 | 300.0 | 5.0 | | 10 | 6 | 3 | 0.120 | 0.020 |
| SEP. 26 | | | | | | | | | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 27 | | | | | | 26 | 6.50 | 20.0 | | 25.0K |
| NOV. 8 | | | | | | 21 | 6.50 | 11.0 | | 25.0K |
| NOV. 17 | | | | | | 22 | 6.90 | 15.0 | | 25.0K |
| DEC. 7 | 75 | 21 | 96 | 36 | 14.0 | 19 | 6.70 | 10.0 | 60 | 45.0 |
| DEC. 21 | | | | | | 19 | 6.20 | 11.0 | | 25.0K |
| JAN. 10 | | | | | | 19 | 6.60 | 9.0 | | 25.0K |
| JAN. 26 | | | | | | 27 | 6.80 | 10.0 | | 25.0K |
| FEB. 16 | | | | | | 23 | 7.00 | 11.0 | | 35.0 |
| MAR. 7 | 19 | 47 | 66 | 20 | 6.0 | 24 | 6.80 | 12.0 | 10 | 25.0K |
| APR. 12 | | | | | | 44 | 6.80 | 22.0 | | 25.0K |
| MAY 8 | | | | | | 22 | 7.10 | 21.0 | | 25.0K |
| MAY 17 | | | | | | 35 | 6.70 | 25.0 | | 25.0K |
| JUNE 13 | | | | 32 | 12.0 | 43 | 7.50 | 29.0 | 20 | 25.0K |
| JULY 10 | | | | | | 42 | | 31.0 | | 25.0K |
| JULY 24 | | | | | | 45 | | 30.0 | | 25.0K |
| AUG. 7 | | | | | | 45 | 5.30 | 34.0 | | 25.0K |
| AUG. 14 | | | | | | 56 | 7.70 | 32.0 | | 16.0 |
| SEP. 18 | | | | | | 57 | 7.40 | 34.0 | | 25.0K |
| SEP. 25 | | | | 26 | 12.0 | 56 | 7.50 | 20.0 | 60 | 25.0K |
| SEP. 26 | | | | | | | | | | |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 27 | 9.5 | | 3.1 | | | |
| NOV. 8 | 10.8 | | 1.2 | | | |
| NOV. 17 | 10.2 | | 1.4 | | | |
| DEC. 7 | 10.1 | | 2.0 | 820 | 1600 | 2300 |
| DEC. 21 | 10.0 | | 7.2 | | | |
| JAN. 10 | 11.5 | | 0.7 | | | |
| JAN. 26 | 11.7 | | 0.9 | | | |
| FEB. 16 | 11.4 | | 1.5 | | | |
| MAR. 7 | 10.5 | | 0.7 | | | |
| MAR. 8 | | | | 60 | 112 | 17 |
| APR. 12 | 8.8 | | 1.1 | | | |
| MAY 8 | 9.6 | | 1.5 | | | |
| MAY 17 | 9.3 | | 1.9 | | | |
| JUNE 13 | 8.7 | | 1.4 | 0 | 85 | 16 |
| JULY 10 | 11.2 | 149.0 | 3.6 | | | |
| JULY 24 | 10.7 | 153.0 | 5.5 | | | |
| AUG. 7 | 9.9 | 137.0 | 4.4 | | | |
| AUG. 14 | 9.6 | 127.0 | 4.4 | | | |
| SEP. 18 | 10.4 | 144.0 | 5.1 | | | |
| SEP. 25 | 9.6 | 117.0 | 2.6 | | | |
| SEP. 26 | | | | 92 | 1680 | 126 |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JUNE 13 | | 2K | 200K | | 30 | 100K | | 50 | 30 |
| SEP. 25 | | 2K | 50K | | 13 | 100K | 0.4K | 50K | 9 |

K Less than.

## 07340000 LITTLE RIVER NEAR HORATIO, ARK.

LOCATION.--Lat 33°55'10", long 94°23'15", in NE¼ sec.10, T.10 S., R.32 W., Sevier County, at gaging station, near left bank on downstream side of bridge on State Highway 41, 0.9 mile downstream from Rolling Fork, 2.0 miles southwest of Horatio, 28.5 miles upstream from Cossatot River, and at mile 72.0.

DRAINAGE AREA.--2,674 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1953 to September 1959, October 1968 to September 1972. Water temperatures: October 1953 to September 1959.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 27 | | | | | | 18 | | 3 | | |
| OCT. 28 | 1790 | | | | | | | | | |
| NOV. 8 | 318 | | | | | 17 | | 7 | | |
| NOV. 17 | 156 | | | | | 18 | | 12 | | |
| DEC. 7 | 6700 | 1000 | 100.0K | 8.0 | 4.3 | 21 | | 4 | 0.100K | 0.300 |
| DEC. 21 | 14600 | | | | | 7 | | 2 | | |
| JAN. 11 | 11600 | | | | | 12 | | 2 | | |
| JAN. 26 | 3920 | | | | | 13 | | 6 | | |
| FEB. 16 | 3470 | | | | | 17 | | 5 | | |
| MAR. 7 | 1340 | | | 4.8 | 2.9 | 18 | 5 | 11 | | 0.460 |
| APR. 12 | 1520 | | | | | 15 | | 8 | | |
| MAY 8 | | | | | | 17 | | 5 | | |
| MAY 16 | 1690 | | | | | 13 | | 5 | | |
| JUNE 12 | 296 | | | | | | | | | |
| JUNE 13 | | 500 | 200.0 | 8.0 | 0.5 | 14 | 7 | 11 | 0.700 | 0.010K |
| JULY 10 | 199 | | | | | 23 | | 31 | | |
| JULY 24 | 261 | | | | | 15 | | 9 | | |
| AUG. 7 | 221 | | | | | 63 | | 15 | | |
| AUG. 14 | 151 | | | | | 12 | | 19 | | |
| SEP. 18 | 257 | | | | | 5 | | 9 | | |
| SEP. 25 | 261 | 1020 | 170.0 | 6.0 | | 9 | 9 | 17 | 0.820 | 0.050 |
| SEP. 26 | | | | | | | | | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 27 | | | | | | 42 | 6.70 | 21.0 | | 30.0 |
| NOV. 8 | | | | | | 52 | 6.40 | 13.0 | | 25.0K |
| NOV. 17 | | | | | | 66 | 7.00 | 15.0 | | 25.0K |
| DEC. 7 | 80 | 86 | 166 | 38 | 20.0 | 45 | 7.10 | 10.0 | 50 | 75.0 |
| DEC. 21 | | | | | | 24 | 6.30 | 11.0 | | 25.0 |
| JAN. 11 | | | | | | 24 | 7.30 | 8.0 | | 25.0K |
| JAN. 26 | | | | | | 37 | 6.90 | 9.0 | | 25.0K |
| FEB. 16 | | | | | | 45 | 6.70 | 11.0 | | 25.0K |
| MAR. 7 | 64 | 18 | 82 | 24 | 12.0 | 67 | 7.10 | 14.0 | 15 | 25.0K |
| APR. 12 | | | | | | 58 | 6.70 | 20.0 | | 25.0K |
| MAY 8 | | | | | | 40 | 6.50 | 22.0 | | 25.0K |
| MAY 16 | | | | | | 60 | 6.70 | 25.0 | | 25.0K |
| JUNE 13 | 21 | 65 | 86 | 22 | 20.0 | 63 | 7.20 | 27.0 | 30 | 25.0K |
| JULY 10 | | | | | | 143 | 8.70 | 30.0 | | 25.0K |
| JULY 24 | | | | | | 51 | 7.20 | 32.0 | | 25.0K |
| AUG. 7 | | | | | | 56 | | 31.0 | | 25.0K |
| AUG. 14 | | | | | | 74 | 6.60 | 31.0 | | 15.0 |
| SEP. 18 | | | | | | 61 | 6.60 | 29.0 | | 25.0K |
| SEP. 25 | | | | 25 | 14.0 | 55 | 7.00 | 24.0 | 40 | 35.0 |
| SEP. 26 | | | | | | | | | | |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 27 | 8.0 | | 1.9 | | | |
| NOV. 8 | 9.1 | | 0.9 | | | |
| NOV. 17 | 9.2 | | 0.8 | | | |
| DEC. 7 | 10.6 | | 2.2 | 1200 | 6400 | 1700 |
| DEC. 21 | 10.1 | | 2.1 | | | |
| JAN. 11 | 10.6 | | 1.8 | | | |
| JAN. 26 | 11.0 | | 2.5 | | | |
| FEB. 16 | 10.8 | | 1.7 | | | |
| MAR. 7 | 9.5 | | 2.6 | | 1310 | 68 |
| APR. 12 | 8.4 | | 5.9 | | | |
| MAY 8 | 8.3 | | 2.7 | | | |
| MAY 16 | 9.7 | | 5.2 | | | |
| JUNE 13 | 8.1 | | 1.9 | 12 | 210 | 20 |
| JULY 10 | 8.3 | 109.0 | 2.0 | | | |
| JULY 24 | 8.3 | 112.0 | 1.9 | | | |
| AUG. 7 | 8.0 | 106.0 | 2.5 | | | |
| AUG. 14 | 8.0 | 107.0 | 3.5 | | | |
| SEP. 18 | 7.6 | 97.0 | 1.6 | | | |
| SEP. 25 | 7.3 | 86.0 | 1.5 | | | |
| SEP. 26 | | | | 480 | 5580 | 124 |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JUNE 13 | | 2K | 200K | | 30 | 100 | | 50K | 10 |
| SEP. 25 | | 2K | 50K | | 130 | 100K | 0.2K | 50K | 9 |

K Less than.

## 07344275 SULPHUR RIVER SOUTH OF TEXARKANA, ARK.

LOCATION.--Lat 33°14'32", long 93°59'58", in SE¼SE¼ sec.28, T.17 S., R.28 W., Miller County, at bridge on State Highway 237, 13.5 miles south of Texarkana.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 4 | 1550 | | | | | | | 50 | | |
| NOV. 9 | 10400 | 400 | 0.0 | 35.2 | 1.5 | 91 | 1K | 9 | 0.300 | 1.800 |
| NOV. 30 | 80 | | | | | 88 | | 43 | | |
| JAN. 11 | | | | | | 55 | | 4 | | |
| FEB. 8 | | 600 | 100.0 | 23.2 | 4.4 | 59 | 10 | | 0.100K | 0.400 |
| FEB. 29 | | | | | | 51 | | 12 | | |
| APR. 11 | | | | | | 55 | | 33 | | |
| MAY 9 | | | | 20.0 | 3.4 | 40 | 1K | 31 | 0.800 | 0.580 |
| JUNE 6 | | | | | | 150 | | 67 | | |
| JULY 11 | | | | | | 57 | | 58 | | |
| AUG. 8 | | 1450 | 575.0 | 46.0 | | 101 | 38 | 57 | 0.300 | 2.300 |
| SEP. 5 | | | | | | 104 | | 76 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 4 | | | | | | | | 25.0 | | |
| NOV. 9 | 164 | 20 | 184 | 94 | 88.0 | 178 | 7.40 | 13.0 | 20 | 25.0 |
| NOV. 30 | | | | | | 166 | 7.50 | 10.0 | | 55.0 |
| JAN. 11 | | | | | | 105 | 7.30 | 9.0 | | |
| FEB. 8 | 156 | 1 | 157 | 76 | 58.0 | 116 | 7.20 | 6.0 | 50 | 30.0 |
| FEB. 29 | | | | | | 138 | 6.90 | 13.0 | | 40.0 |
| APR. 11 | | | | | | 204 | 6.90 | 20.0 | | 250.0 |
| MAY 9 | 194 | 213 | 407 | 64 | 50.0 | 154 | 6.60 | 20.0 | 120 | 180.0 |
| JUNE 6 | | | | | | 444 | 7.50 | 25.0 | | 300.0 |
| JULY 11 | | | | | | 345 | | 26.0 | | 200.0 |
| AUG. 8 | 337 | 76 | 413 | 166 | 116.0 | 380 | 6.80 | 28.0 | 40 | 220.0 |
| SEP. 5 | | | | | | 455 | 7.30 | 25.0 | | 225.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| NOV. 2 | | | | 22000 | 84000 | 630 |
| NOV. 9 | 6.4 | | 1.4 | | | |
| NOV. 30 | 8.5 | | 1.9 | | | |
| JAN. 11 | 9.4 | | 1.2 | | | |
| FEB. 8 | 8.9 | | 0.1 | 103 | 3200 | 110 |
| FEB. 29 | 6.9 | | 1.5 | | | |
| APR. 11 | 5.9 | | 2.5 | | | |
| MAY 9 | 6.8 | | 5.8 | 735 | 3500 | |
| JUNE 6 | 4.5 | | 4.8 | | | |
| JULY 11 | 6.0 | 73.0 | 3.9 | | | |
| AUG. 8 | 3.4 | 43.0 | 3.3 | 430 | 13700 | 100 |
| SEP. 5 | 3.3 | 39.0 | 2.0 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 8 | 37 | 2K | 100K | | 20 | 80K | 0.5K | 50K | 38 |

K Less than.

### 07344290 DAYS CREEK SOUTH OF TEXARKANA, ARK.

LOCATION.--Lat 33°21'12", long 94°02'33", in SW¼NW¼ sec.19, T.16 S., R.28 W., Miller County, at bridge on Texas-Arkansas State line road, 5.2 miles south of junction of U.S. Highway 67 and State line road in Texarkana.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 4 | | | | | | | | 400 | | |
| NOV. 9 | | 350 | 100.0 | 27.2 | 13.6 | 208 | 35 | 780 | 0.200 | |
| NOV. 30 | | | | | | 147 | | 10 | | |
| JAN. 11 | | | | | | 66 | | 102 | | |
| FEB. 8 | | 800 | 400.0 | 17.6 | 6.8 | 63 | 45 | 90 | 0.100K | 0.500 |
| FEB. 29 | | | | | | 95 | | 118 | | |
| APR. 11 | | | | | | 143 | | 230 | | |
| MAY 9 | | | | 19.2 | 10.7 | 127 | 66 | 355 | 0.300 | 3.800 |
| JUNE 6 | | | | | | 150 | | 535 | | |
| JULY 11 | | | | | | 191 | | 845 | | |
| AUG. 8 | | 400 | 200.0 | 26.0 | | 180 | 76 | 655 | 0.100K | 0.170 |
| SEP. 5 | | | | | | 15 | | 19 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 4 | | | | | | | | 26.0 | | |
| NOV. 9 | 1598 | 16 | 1614 | 124 | 68.0 | 2247 | 7.40 | 13.0 | 40 | 40.0 |
| NOV. 30 | | | | | | 833 | 7.50 | 11.0 | | 30.0 |
| JAN. 11 | | | | | | 500 | 7.00 | 12.0 | | |
| FEB. 8 | 312 | 0 | 312 | 72 | 44.0 | 416 | 7.80 | | 40 | |
| FEB. 29 | | | | | | 500 | 7.20 | 14.0 | | 30.0 |
| APR. 11 | | | | | | 552 | 7.00 | 20.0 | | 25.0K |
| MAY 9 | 761 | 45 | 806 | 92 | 48.0 | 1190 | 7.30 | 20.0 | 50 | 65.0 |
| JUNE 6 | | | | | | 2000 | 7.20 | 24.0 | | 50.0 |
| JULY 11 | | | | | | 2222 | | 24.0 | | 25.0K |
| AUG. 8 | 1533 | 63 | 1596 | 134 | 66.0 | 2000 | 7.70 | 28.0 | 60 | 50.0 |
| SEP. 5 | | | | | | 118 | 6.60 | 25.0 | | 350.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| NOV. 2 | | | | 1100000 | 4300000 | 84000 |
| NOV. 9 | 0.0 | | 55.0 | | | |
| NOV. 30 | 0.4 | | 17.0 | | | |
| JAN. 11 | 3.5 | | 13.0 | | | |
| FEB. 8 | 1.9 | | 18.2 | | | |
| FEB. 15 | | | | 560000 | 3300000 | 28000 |
| FEB. 29 | 0.6 | | 22.7 | | | |
| APR. 11 | 0.0 | | 25.0L | | | |
| MAY 9 | 5.2 | | 18.8L | 280000 | 1740000 | |
| JUNE 6 | 9.1 | | 9.1L | | | |
| JULY 11 | 0.0 | 0.0 | 39.0 | | | |
| AUG. 5 | | | | 260000 | 5800000 | 25000 |
| AUG. 8 | 1.7 | 22.0 | 15.6L | | | |
| SEP. 5 | 5.0 | 60.0 | 5.0L | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 8 | 48 | 2 | 100K | | 10 | 80K | 0.5K | 50K | 65 |

K Less than.
L Greater than.

## 07344350 RED RIVER NEAR DODDRIDGE, ARK.

LOCATION.--Lat 33°05'34", long 93°51'46", in NE¼NW¼ sec.24, T.19 S., R.27 W., Miller County, on right bank, 1500 ft upstream from State Highway 160 ferry crossing, and 2.7 miles east of Doddridge.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 4 | 6300 | | | | | | | 49 | | |
| NOV. 9 | 14000 | 700 | 100.0 | 38.4 | 14.1 | 73 | 10 | 11 | 0.100 | 0.550 |
| NOV. 30 | 8700 | | | | | 7 | | 76 | | |
| JAN. 11 | | | | | | 55 | | 18 | | |
| FEB. 8 | | 800 | 1300.0 | 36.0 | 8.3 | 78 | 36 | 64 | 0.100 | 0.400 |
| FEB. 29 | | | | | | 81 | | 74 | | |
| APR. 11 | | | | | | 106 | | 126 | | |
| MAY 9 | | | | 24.8 | 6.4 | 75 | 15 | 24 | 0.100K | 0.490 |
| JUNE 6 | | | | | | 133 | | 205 | | |
| JULY 11 | | | | | | 152 | | 255 | | |
| AUG. 8 | | 100 | 125.0 | 51.0 | | 147 | 140 | 330 | 0.100K | 0.160 |
| SEP. 5 | | | | | | 196 | | 235 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 4 | | | | | | | | 26.0 | | |
| NOV. 9 | 174 | 225 | 399 | 154 | 96.0 | 210 | 7.30 | 13.0 | 60 | 170.0 |
| NOV. 30 | | | | | | 377 | 7.80 | 9.0 | | 120.0 |
| JAN. 11 | | | | | | 153 | 7.40 | 8.0 | | |
| FEB. 8 | 302 | 77 | 379 | 124 | 90.0 | 320 | 7.20 | 7.0 | 50 | 85.0 |
| FEB. 29 | | | | | | 408 | 7.60 | | | 50.0 |
| APR. 11 | | | | | | 666 | 7.70 | 19.0 | | 50.0 |
| MAY 9 | 172 | 99 | 271 | 89 | 62.0 | 202 | 7.10 | 21.0 | 40 | 85.0 |
| JUNE 6 | | | | | | 1087 | 7.80 | 28.0 | | 25.0K |
| JULY 11 | | | | | | 535 | | 27.0 | | 25.0K |
| AUG. 8 | 786 | 42 | 828 | 296 | 128.0 | 1000 | 7.80 | 29.0 | 15 | 25.0K |
| SEP. 5 | | | | | | 1380 | 8.20 | 26.0 | | 32.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| NOV. 2 | | | | 360 | 3100 | 510 |
| NOV. 9 | 6.5 | | 3.3 | | | |
| NOV. 30 | 10.6 | | 1.5 | | | |
| JAN. 11 | 9.4 | | 1.2 | | | |
| FEB. 8 | 10.8 | | 2.1 | 60 | 230 | 23 |
| FEB. 29 | 9.2 | | 2.3 | | | |
| APR. 11 | 8.6 | | 2.0 | | | |
| MAY 9 | 8.6 | | 3.0 | 52 | 8000 | |
| JUNE 6 | 7.6 | | 2.1 | | | |
| JULY 11 | 8.9 | 110.0 | 3.5 | | | |
| AUG. 8 | 7.7 | 99.0 | 3.7 | 55 | 425 | 12 |
| SEP. 5 | 7.3 | 89.0 | 2.6 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 8 | 34 | 2K | 100K | | 10 | 80 | 0.3K | 50K | 42 |
| SEP. 5 | | | | | | | | | |

K Less than.

## 07344380 POSTEN BAYOU NEAR WARDVIEW, LA.

LOCATION.--Lat 33°00'26", long 93°46'32", in NE¼NE¼ sec.11, T.23 N., R.14 W., Bossier Parish, at bridge on Missionary Ferry road, and 3.0 miles northeast of Wardview.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | 10 | | | | | | | 18 | | |
| NOV. 9 | 2 | | | | | | | 29 | | |
| NOV. 30 | 4 | 300 | 100.0K | 18.4 | 13.1 | 101 | 2 | 53 | 0.010K | 0.900 |
| JAN. 11 | 94 | | | | | | | 10 | | |
| FEB. 8 | 11 | | | | | | | 22 | | |
| FEB. 29 | 3 | 1000 | 100.0 | 25.6 | 16.0 | 109 | 22 | 39 | 0.100K | 0.180 |
| APR. 11 | 1 | | | | | 88 | | 32 | | |
| MAY 9 | | | | | | 92 | | 28 | | |
| MAY 10 | 1 | | | | | | | | | |
| JUNE 6 | | 900 | 450.0 | 50.0 | 17.0 | 60 | 30 | 79 | 0.300 | |
| JUNE 7 | 0 | | | | | | | | | |
| JULY 11 | 8 | | | | | 166 | | 47 | | |
| AUG. 8 | 2 | | | | | 220 | | 75 | | |
| SEP. 5 | 1 | 750 | 210.0 | 48.0 | | 177 | 11 | 46 | 11.600 | 0.190 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | | | | | | | | 22.0 | | |
| NOV. 9 | | | | | | 273 | | | | |
| NOV. 30 | 224 | 48 | 272 | 100 | 46.0 | 281 | 8.10 | 9.0 | 30 | 65.0 |
| JAN. 11 | | | | | | 125 | | 10.0 | | |
| FEB. 8 | | | | | | 173 | | 8.0 | | |
| FEB. 29 | 276 | 8 | 284 | 140 | 74.0 | 294 | 7.90 | 16.0 | 60 | 75.0 |
| APR. 11 | | | | | | 259 | 7.40 | 20.0 | | 150.0 |
| MAY 9 | | | | | | 251 | 6.90 | | | 140.0 |
| JUNE 6 | 373 | 77 | 450 | 194 | 126.0 | 559 | 6.80 | | 120 | 95.0 |
| JULY 11 | | | | | | 364 | | 27.0 | | 150.0 |
| AUG. 8 | | | | | | 490 | 7.60 | 29.0 | | 55.0 |
| SEP. 5 | 344 | 77 | 421 | 210 | 120.0 | 566 | 7.30 | 25.0 | 30 | 130.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| NOV. 30 | 8.6 | | 2.3 | | | |
| FEB. 29 | 8.2 | | 1.7 | 490 | 19000 | 80 |
| APR. 11 | 5.6 | | 2.9 | | | |
| MAY 9 | 3.9 | | 5.4 | | | |
| JUNE 6 | 3.7 | | 6.4 | 226 | 1500 | 156 |
| JULY 11 | 4.4 | 54.0 | 2.0 | | | |
| AUG. 8 | 1.7 | 22.0 | 1.5 | | | |
| SEP. 5 | 2.5 | 30.0 | 3.0 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JUNE 6 | | | | | | | | | 300 |
| SEP. 5 | 10K | 2K | 100K | | 10K | 100K | 0.1K | 50K | 30K |

K Less than.

## 07346410 STATE LINE CREEK NEAR RODESSA, LA.

LOCATION.--Lat 32°59'40", long 94°00'28", in NE¼NW¼ sec.15, T.23 N., R.16 W., Caddo Parish, La., at bridge on Louisiana State Highway 1, 2.0 miles northwest of Rodessa.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 4 | 0 | | | | | | | 16 | | |
| NOV. 9 | 0 | 3100 | 3400.0 | 16.0 | 4.4 | 19 | 1K | 78 | 0.200 | 0.050 |
| NOV. 30 | 2 | | | | | 6 | | 10 | | |
| JAN. 11 | 26 | | | | | | | 18 | | |
| FEB. 8 | 21 | 1200 | 3200.0 | 6.8 | 1.7 | 7 | 7 | 21 | 0.100K | 0.200 |
| FEB. 29 | 0 | | | | | | | 32 | | |
| APR. 11 | 0 | | | | | | | 37 | | |
| MAY 9 | | | | 6.4 | 2.9 | 14 | 1K | 29 | 0.900 | 0.010K |
| MAY 10 | 0 | | | | | | | | | |
| JUNE 6 | | | | | | 24 | | 15 | | |
| JUNE 7 | 0 | | | | | | | | | |
| JULY 11 | 0 | | | | | | | 19 | | |
| AUG. 8 | 0 | 750 | 725.0 | 6.0 | | 21 | 8 | 20 | 0.800 | 0.010K |
| SEP. 5 | 0 | | | | | 20 | | 16 | | |
| SEP. 25 | | | | | | | | | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 4 | | | | | | | | 26.0 | | |
| NOV. 9 | 237 | 21 | 258 | 58 | 40.0 | 240 | 6.40 | 13.0 | 80 | 25.0K |
| NOV. 30 | | | | | | 208 | 6.20 | 8.0 | | 25.0K |
| JAN. 11 | | | | | | 111 | | 6.0 | | |
| FEB. 8 | 95 | 8 | 103 | 24 | 17.0 | 72 | 6.20 | 1.0 | 60 | 25.0K |
| FEB. 29 | | | | | | 114 | | 14.0 | | |
| APR. 11 | | | | | | 142 | | 18.0 | | |
| MAY 9 | 153 | 21 | 174 | 28 | 16.0 | 103 | 6.30 | 16.0 | 200 | 30.0 |
| JUNE 6 | | | | | | 120 | 6.80 | 23.0 | | 25.0K |
| JULY 11 | | | | | | 83 | | 24.0 | | |
| AUG. 8 | 90 | 5 | 95 | 50 | 16.0 | 93 | 6.50 | 27.0 | 60 | 25.0K |
| SEP. 5 | | | | | | 91 | 6.70 | 25.0 | | 25.0K |
| SEP. 25 | | | | | | | | | 80 | |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| NOV. 2 | | | | 770 | 4600 | 27 |
| NOV. 9 | 1.3 | | 4.0 | | | |
| NOV. 30 | 5.4 | | 1.6 | | | |
| FEB. 8 | 10.1 | | 0.5 | 36 | 359 | 51 |
| MAY 9 | 4.6 | | 3.8 | 125 | 1320 | |
| JUNE 6 | 3.2 | | 3.6 | | | |
| AUG. 8 | 4.1 | 51.0 | 2.4 | 633 | 2200 | 136 |
| SEP. 5 | 2.3 | 27.0 | 3.0 | | | |
| SEP. 25 | | | | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 8 | 34 | 2K | 100 | | 10K | 80K | 0.2K | 50K | 22 |
| SEP. 25 | | | | | | | | | |

K Less than.

## 07346950 KELLY BAYOU NEAR IDA, LA.

LOCATION.--Lat 33°00'05", long 93°51'55", in SW¼NE¼ sec.12, T.23 N., R.15 W., Caddo Parish, La., at bridge on Louisiana State Highway 168, 1.2 miles south of Arkansas-Louisiana State line, 1.8 miles east of Ida.

DRAINAGE AREA.--73 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 4 | 22 | | | | | | | 29 | | |
| NOV. 9 | 20 | 750 | 370.0 | 26.4 | 11.7 | 90 | 6 | 37 | 0.200 | 0.600 |
| NOV. 30 | 0 | | | | | | | 58 | | |
| JAN. 11 | 10 | | | | | | | 26 | | |
| FEB. 8 | 28 | | | | | 5 | 7 | 38 | 0.300 | 0.100 |
| FEB. 29 | 20 | | | | | | | 40 | | |
| APR. 11 | 0 | | | | | | | 47 | | |
| MAY 9 | | | | 7.2 | 3.4 | 15 | 1K | 30 | 0.800 | 0.760 |
| MAY 10 | 3 | | | | | | | | | |
| JUNE 6 | | | | | | 28 | | 11 | | |
| JUNE 7 | 0 | | | | | | | | | |
| JULY 11 | 2 | | | | | | | 5 | | |
| AUG. 8 | 0 | 1300 | 1600.0 | 17.0 | | 74 | 6 | 22 | 0.100K | 0.180 |
| SEP. 5 | 0 | | | | | 25 | | 11 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 4 | | | | | | | | 27.0 | | |
| NOV. 9 | 198 | 31 | 229 | 114 | 66.0 | 243 | 7.50 | 11.0 | 40 | 25.0K |
| NOV. 30 | | | | | | 200 | | 8.0 | | |
| JAN. 11 | | | | | | 111 | | 7.0 | | |
| FEB. 8 | 118 | 3 | 121 | 23 | 12.0 | 101 | 6.40 | 4.0 | 40 | 25.0K |
| FEB. 29 | | | | | | 147 | | 14.0 | | |
| APR. 11 | | | | | | 181 | | 18.0 | | |
| MAY 9 | 152 | 31 | 183 | 32 | 18.0 | 105 | 6.20 | 17.0 | 160 | 40.0 |
| JUNE 6 | | | | | | 238 | 7.20 | 24.0 | | 25.0K |
| JULY 11 | | | | | | 144 | | 25.0 | | |
| AUG. 8 | 163 | 3 | 166 | 86 | 42.0 | 177 | 6.70 | 28.0 | 60 | 25.0K |
| SEP. 5 | | | | | | 170 | 7.40 | 26.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| NOV. 2 | | | | 580 | 2900 | 620 |
| NOV. 9 | 7.7 | | 1.5 | | | |
| FEB. 8 | 11.1 | | 1.0 | 60 | 420 | 113 |
| MAY 9 | 5.3 | | 1.5 | 416 | 4800 | |
| JUNE 6 | 0.8 | | 5.0 | | | |
| AUG. 8 | 1.8 | 23.0 | 2.7 | 15 | 250 | 80 |
| SEP. 5 | 1.8 | 22.0 | 3.3 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 8 | 56 | 2K | 100K | | 25 | 80 | 0.1K | 50K | 73 |
| SEP. 5 | | | | | | | | | |

K Less than.

## 07348680 CROOKED CREEK AT ARKANSAS-LOUISIANA STATE LINE

LOCATION.--Lat 33°01'06", long 93°25'20", in SE¼SE¼ sec.7, T.20 S., R.22 W., Columbia County, at bridge on county road 200 ft north of Arkansas-Louisiana State line, and 2.6 miles east of Welcome, Ark.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | 0.1 | | | | | | | 280 | | |
| NOV. 9 | 0 | | | | | | | | | |
| NOV. 30 | 0.05 | | | | | 4 | | 840 | | |
| JAN. 11 | 44 | 500 | 200.0 | 5.6 | 1.5 | 10 | 6 | 18 | 0.700 | 0.290 |
| FEB. 8 | 3 | | | | | 14 | | 59 | | |
| FEB. 29 | 1 | | | | | 41 | | 144 | | |
| APR. 11 | 1 | | | 17.6 | 6.3 | 26 | 4 | 118 | 0.300 | 0.060 |
| MAY 9 | 1 | | | | | 31 | | 156 | | |
| JUNE 7 | 0 | | | | | | | | | |
| JULY 11 | 0 | | | | | | | | | |
| AUG. 8 | 0 | | | | | 13 | | 430 | | |
| SEP. 5 | | | | | | 9 | | 990 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | | | | | | | | 21.0 | | |
| NOV. 30 | | | | | | 1709 | 6.20 | 9.0 | | 25.0K |
| JAN. 11 | 107 | 7 | 114 | 20 | 14.0 | 71 | 6.50 | 9.0 | 90 | 25.0K |
| FEB. 8 | | | | | | 192 | 6.50 | 8.0 | | 25.0K |
| FEB. 29 | | | | | | 500 | 6.90 | 15.0 | | 25.0K |
| APR. 11 | 312 | 40 | 352 | 70 | 44.0 | 392 | 6.90 | 19.0 | 40 | 25.0K |
| MAY 9 | | | | | | 431 | 6.30 | 17.0 | | 25.0K |
| AUG. 8 | | | | | | 1000 | 6.20 | 27.0 | | 25.0K |
| SEP. 5 | | | | | | 1910 | 6.30 | 23.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| NOV. 30 | 8.2 | | 0.6 | | | |
| JAN. 11 | 7.8 | | 1.0 | | | |
| FEB. 1 | | | | 300 | 520 | 195 |
| FEB. 8 | 9.5 | | 0.2 | | | |
| FEB. 29 | 5.9 | | 2.1 | | | |
| APR. 11 | 5.0 | | 2.1 | | | |
| MAY 9 | 4.1 | | 1.9 | | | |
| AUG. 8 | 2.8 | 35.0 | 1.2 | | | |
| SEP. 5 | 3.6 | 41.0 | 1.0 | | | |

## 07348700 BAYOU DORCHEAT NEAR SPRINGHILL, LA.

LOCATION.--Lat 32°59'40", long 93°23'45", in NE¼NE¼ sec.16, T.23 N., R.10 W., Webster Parish, at gaging station at bridge on Louisiana State Highway 157, 0.4 mile downstream from Crooked Creek, 1.7 miles downstream from Arkansas-Louisiana State line, and 2.8 miles southeast of Springhill city limits.

DRAINAGE AREA.--605 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1958, October 1961 to September 1962, October 1967 to September 1972 (discontinued).

REMARKS.--Additional analyses furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DIS-CHARGE (CFS) | DIS-SOLVED SILICA (SIO2) (MG/L) | DIS-SOLVED CAL-CIUM (CA) (MG/L) | DIS-SOLVED MAG-NE-SIUM (MG) (MG/L) | DIS-SOLVED SODIUM (NA) (MG/L) | DIS-SOLVED PO-TAS-SIUM (K) (MG/L) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | DIS-SOLVED SULFATE (SO4) (MG/L) | DIS-SOLVED CHLO-RIDE (CL) (MG/L) | DIS-SOLVED FLUO-RIDE (F) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DEC. | | | | | | | | | | | | |
| 01... | 20 | 11 | 13 | 3.0 | 66 | 4.1 | 47 | 0 | 39 | 19 | 92 | .2 |
| JAN. | | | | | | | | | | | | |
| 24... | 182 | 15 | 15 | 4.0 | 53 | 1.6 | 12 | 0 | 10 | 11 | 100 | .1 |
| FEB. | | | | | | | | | | | | |
| 29... | 150 | 8.6 | 17 | 4.3 | 67 | 2.6 | 15 | 0 | 12 | 8.2 | 130 | .1 |
| APR. | | | | | | | | | | | | |
| 20... | 60 | 13 | 19 | 2.8 | 64 | 3.2 | 0 | 0 | 0 | .8 | 130 | .2 |
| MAY | | | | | | | | | | | | |
| 18... | 49 | 15 | 18 | 4.6 | 68 | 3.4 | 16 | 0 | 13 | 6.8 | 130 | .2 |
| JUNE | | | | | | | | | | | | |
| 20... | 3.1 | 15 | 24 | 6.3 | 96 | 5.2 | 74 | 0 | 61 | 10 | 160 | .1 |
| AUG. | | | | | | | | | | | | |
| 01... | 27 | 9.2 | 16 | 3.9 | 68 | 3.1 | 44 | 0 | 36 | 14 | 110 | .2 |
| SEP. | | | | | | | | | | | | |
| 07... | 16 | 16 | 19 | 10 | 120 | 5.7 | 90 | 0 | 74 | 11 | 180 | .3 |
| 18... | 19 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | DIS-SOLVED NITRATE (N) (MG/L) | DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L) | DIS-SOLVED SOLIDS (TONS PER AC-FT) | DIS-SOLVED SOLIDS (TONS PER DAY) | HARD-NESS (CA,MG) (MG/L) | NON-CAR-BONATE HARD-NESS (MG/L) | PERCENT SODIUM | SODIUM AD-SORP-TION RATIO | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | COLOR (PLAT-INUM-COBALT UNITS) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DEC. | | | | | | | | | | | | |
| 01... | .30 | 242 | .33 | 13.4 | 45 | 6 | 76 | 4.3 | 440 | 6.8 | 9.0 | 20 |
| JAN. | | | | | | | | | | | | |
| 24... | .02 | 275 | .37 | 135 | 54 | 44 | 67 | 3.1 | 402 | 6.2 | 16.0 | 15 |
| FEB. | | | | | | | | | | | | |
| 29... | .07 | 306 | .42 | 126 | 60 | 48 | 70 | 3.8 | 478 | 6.8 | 15.0 | 15 |
| APR. | | | | | | | | | | | | |
| 20... | .20 | 320 | .44 | 51.8 | 59 | 43 | 69 | 3.6 | 471 | 6.7 | 22.0 | 20 |
| MAY | | | | | | | | | | | | |
| 18... | .10 | 327 | .44 | 43.4 | 64 | 51 | 68 | 3.7 | 501 | 6.0 | 20.0 | 10 |
| JUNE | | | | | | | | | | | | |
| 20... | .02 | 387 | .53 | 3.25 | 86 | 25 | 69 | 4.5 | 677 | 1.2 | 27.5 | 10 |
| AUG. | | | | | | | | | | | | |
| 01... | .14 | 271 | .37 | 20.0 | 56 | 20 | 71 | 4.0 | 493 | 6.4 | 29.0 | 25 |
| SEP. | | | | | | | | | | | | |
| 07... | .63 | 450 | .61 | 19.4 | 89 | 16 | 73 | 5.5 | 809 | 7.0 | 25.0 | 15 |
| 18... | -- | -- | -- | -- | -- | -- | -- | -- | 819 | -- | 26.0 | -- |

## 07348700 BAYOU DORCHEAT NEAR SPRINGHILL, LA.--continued

## ADDITIONAL CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | 7 | | | | | | | 65 | | |
| NOV. 9 | 4 | | | | | 105 | | 157 | | |
| NOV. 30 | 22 | | | | | 37 | | 100 | | |
| JAN. 11 | 1850 | 500 | 5200.0 | | | 4 | 11 | 54 | | 0.520 |
| JAN. 25 | | | | | | | | 320 | | |
| FEB. 8 | 594 | | | | | 2 | | 88 | | |
| FEB. 29 | 150 | | | | | 12 | | 133 | | |
| APR. 11 | 167 | | | 14.4 | 4.9 | 12 | 3 | 111 | 0.300 | 0.060 |
| MAY 9 | 393 | | | | | 9 | | 89 | | |
| JUNE 6 | | | | | | 36 | | 185 | | |
| JUNE 7 | 4 | | | | | | | | | |
| JULY 11 | 33 | 500 | 300.0 | 18.4 | 5.4 | 30 | 17 | 116 | 0.100K | 0.320 |
| AUG. 8 | 11 | | | | | 32 | | 210 | | |
| SEP. 5 | 20 | | | | | 109 | | 145 | | |

| DATE | RESIDUE DISS-180 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | | | | | | | | 21.0 | | |
| NOV. 9 | | | | | | 625 | 7.40 | 15.0 | | |
| NOV. 30 | | | | | | 344 | 7.20 | 9.0 | | 25.0K |
| JAN. 11 | | | | 36 | 22.0 | 200 | 5.90 | 10.0 | | 25.0K |
| FEB. 8 | | | | | | 246 | 5.20 | 8.0 | | 25.0K |
| FEB. 29 | | | | | | 425 | 6.80 | 14.0 | | 25.0K |
| APR. 11 | 273 | 30 | 303 | 56 | 36.0 | 333 | 6.40 | 19.0 | 40 | 25.0K |
| MAY 9 | | | | | | 275 | 6.10 | 19.0 | | 25.0K |
| JUNE 6 | | | | | | 685 | 7.60 | 22.0 | | 25.0K |
| JULY 11 | 305 | 5 | 310 | 46 | 18.0 | 400 | 8.10 | 24.0 | 60 | 25.0K |
| AUG. 8 | | | | | | 480 | 7.10 | 28.0 | | 25.0K |
| SEP. 5 | | | | | | 742 | 7.70 | 24.0 | | 43.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MPN-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| NOV. 9 | 5.5 | | 3.8 | | | |
| NOV. 30 | 7.8 | | 1.7 | | | |
| JAN. 11 | 8.8 | | 1.4 | | | |
| FEB. 8 | 9.9 | | 1.0 | | | |
| FEB. 29 | 8.4 | | 1.2 | | | |
| APR. 11 | 6.2 | | 1.4 | | | |
| MAY 9 | 6.8 | | 2.1 | | | |
| JUNE 6 | 10.6 | | 3.8 | | | |
| JULY 11 | 5.3 | 62.0 | 0.9 | | | |
| AUG. 8 | 2.5 | 32.0 | 2.7 | | | |
| SEP. 5 | 3.1 | 36.0 | 7.3 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JULY 11 | | 13 | 100K | | 205 | 200 | | 30K | 210 |

K Less than.

## 07348705 CYPRESS CREEK AT ARKANSAS-LOUISIANA STATE LINE

LOCATION.--Lat 33°01'02", long 93°19'19", in NE¼NW¼ sec.5, T.23 N., R.9 W., Webster Parish, at bridge on Louisiana State Highway 159, 200 ft south of Arkansas-Louisiana State line, and 5.0 miles north of Shongaloo, La.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | 0 | | | | | | | 36 | | |
| NOV. 9 | 0 | | | | | | | | | |
| NOV. 30 | 10 | | | | | 20 | | 14 | | |
| JAN. 11 | 59 | 900 | 600.0 | 11.2 | 4.9 | 4 | 7 | 88 | 0.100K | 0.230 |
| FEB. 8 | 23 | | | | | 4 | | 108 | | |
| FEB. 27 | 11 | | | | | | | | | |
| FEB. 29 | | | | | | 8 | | 134 | | |
| APR. 11 | 10 | | | 12.0 | 8.8 | 10 | 3 | 92 | 0.300 | 0.010K |
| MAY 9 | 2 | | | | | | | 87 | | |
| JUNE 6 | | | | | | 38 | | 75 | | |
| JUNE 7 | 0 | | | | | | | | | |
| JULY 11 | 0 | | | | | | | | | |
| AUG. 8 | 0 | | | | | 24 | | 27 | | |
| SEP. 5 | 0 | | | | | 33 | | 24 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | | | | | | | | 21.0 | | |
| NOV. 30 | | | | | | 100 | 6.50 | 9.0 | | 40.0 |
| JAN. 11 | 224 | 18 | 242 | 48 | 28.0 | 333 | 5.90 | 12.0 | 60 | 25.0K |
| FEB. 8 | | | | | | 294 | 5.90 | 8.0 | | 25.0K |
| FEB. 29 | | | | | | 416 | 6.30 | 14.0 | | 25.0K |
| APR. 11 | 265 | 3 | 268 | 66 | 30.0 | 285 | 6.20 | 19.0 | 80 | 25.0K |
| MAY 9 | | | | | | 268 | 6.20 | 16.0 | | 30.0 |
| JUNE 6 | | | | | | 323 | 7.10 | 20.0 | | 30.0 |
| AUG. 8 | | | | | | 136 | 6.70 | 31.0 | | |
| SEP. 5 | | | | | | 162 | 7.10 | 24.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| NOV. 30 | 0.8 | | 9.0 | | | |
| JAN. 11 | 9.0 | | 0.9 | 87 | 190 | 49 |
| FEB. 8 | 10.7 | | 1.0 | | | |
| FEB. 29 | 7.8 | | 1.0 | | | |
| APR. 11 | 6.1 | | 0.8 | 34 | 438 | 40 |
| MAY 9 | 5.2 | | 1.9 | | | |
| JUNE 6 | 1.1 | | 5.0 | | | |
| AUG. 8 | 1.2 | 16.0 | 9.3 | | | |
| SEP. 5 | 1.2 | 14.0 | 5.0 | | | |

K Less than.

## 07349445 BODCAU CREEK NEAR TAYLOR, ARK.

LOCATION.--Lat 33°02'41", long 93°31'18", in SW¼SW¼ sec.32, T.19 S., R.23 W., Lafayette County, at bridge on State Highway 160, 0.4 mile south of Lake Erling Dam, and 4.4 miles southwest of Taylor..

PERIOD OF RECORD.--Chemical analyses: May 1950 to October 1952, October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 4 | 72 | | | | | | | | | |
| OCT. 5 | | | | | | | | 43 | | |
| NOV. 9 | 97 | | | | | 23 | | 47 | | |
| NOV. 30 | 230 | 100K | 100.0K | 5.6 | 2.4 | 21 | 1 | 47 | 0.100K | 0.010K |
| JAN. 11 | 250 | | | | | | | 94 | | |
| FEB. 8 | 370 | | | | | 8 | | 33 | | |
| FEB. 29 | 345 | 600 | 200.0 | 5.6 | 2.9 | 8 | 1K | 34 | 0.100K | 0.120 |
| APR. 11 | 75 | | | | | 10 | | 41 | | |
| MAY 9 | | | | | | 16 | | 42 | | |
| MAY 10 | 56 | | | | | | | | | |
| JUNE 6 | | 1100 | 3500.0 | 12.0 | 4.0 | 17 | 1K | 49 | 0.200 | |
| JUNE 7 | 42 | | | | | | | | | |
| JULY 11 | 50 | | | | | 19 | | 51 | | |
| AUG. 8 | 70 | | | | | 23 | | 90 | | |
| SEP. 5 | | 1600 | 4500.0 | 12.0 | | 31 | 1K | 55 | 0.400 | 0.060 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | | | | | | | | 21.0 | | |
| NOV. 9 | | | | | | 178 | 6.90 | 15.0 | | |
| NOV. 30 | 131 | 10 | 149 | 34 | 24.0 | 161 | 7.20 | 11.0 | 15 | 25.0K |
| JAN. 11 | | | | | | 222 | | 10.0 | | |
| FEB. 8 | | | | | | 110 | 6.40 | 5.0 | | 25.0K |
| FEB. 29 | 96 | 2 | 98 | 26 | 14.0 | 109 | 6.40 | 15.0 | 30 | 25.0K |
| APR. 11 | | | | | | 147 | 6.50 | 19.0 | | 25.0K |
| MAY 9 | | | | | | 147 | 6.20 | 21.0 | | 25.0K |
| JUNE 6 | 165 | 7 | 152 | 40 | 30.0 | 200 | 6.00 | | 80 | 25.0K |
| JULY 11 | | | | | | 167 | | 28.0 | | 25.0K |
| AUG. 8 | | | | | | 186 | 6.00 | 30.0 | | 25.0K |
| SEP. 5 | 150 | 8 | 158 | 58 | 30.0 | 26 | 6.55 | 26.0 | 20 | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| NOV. 9 | 9.4 | | 1.3 | | | |
| NOV. 30 | 10.4 | | 1.3 | | | |
| FEB. 8 | 10.8 | | 1.7 | | | |
| FEB. 29 | 9.8 | | 1.9 | | | |
| MAR. 29 | | | | 276 | 11000 | 0 |
| APR. 11 | 8.9 | | 1.6 | | | |
| MAY 9 | 8.5 | | 2.1 | | | |
| JUNE 6 | 7.9 | | 2.0 | 185 | 430 | 80 |
| JULY 11 | 8.6 | 109.0 | 3.0 | | | |
| AUG. 8 | 7.1 | 93.0 | 1.5 | | | |
| SEP. 5 | 1.1 | 13.0 | 2.0 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JUNE 6 | | | | | | | | | 150 |
| SEP. 5 | 10K | 2K | 100K | | 10K | 100K | 0.2K | 50K | 460 |

K Less than.

### 07349453 WHEELER CREEK NEAR ARKANA, ARK.

LOCATION.--Lat 33°01'47", long 93°38'36", in SW¼NW¼ sec.7, T.20 S., R.24 W., Lafayette County, at bridge on county road, 0.7 mile north of Arkansas-Louisiana State line, and 1.9 miles east of Arkana.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | 0 | | | | | | | 7 | | |
| NOV. 9 | 0 | | | | | | | 7 | | |
| NOV. 30 | 0 | 1300 | 100.0K | 6.4 | 2.4 | 23 | 1K | 9 | 0.300 | 1.200 |
| JAN. 11 | 0 | | | | | | | 2 | | |
| FEB. 8 | 0 | | | | | | | 4 | | |
| FEB. 29 | 0 | 1000 | 200.0 | 8.0 | 4.9 | 31 | 1K | 5 | 0.100K | 0.290 |
| APR. 11 | 0 | | | | | 29 | | 9 | | |
| MAY 9 | | | | | | 24 | | 3 | | |
| MAY 10 | 0 | | | | | | | | | |
| JUNE 6 | | 2700 | 700.0 | 8.0 | 2.0 | 20 | 1K | 4 | 0.700 | |
| JUNE 7 | 0 | | | | | | | | | |
| JULY 11 | 0 | | | | | 24 | | 4 | | |
| AUG. 8 | 0 | | | | | | | | | |
| SEP. 5 | 0 | 3000 | 1070.0 | 5.6 | | 31 | 2 | 2 | 0.700 | 0.240 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | | | | | | | | 21.0 | | |
| NOV. 9 | | | | | | 100 | | | | |
| NOV. 30 | 32 | 90 | 122 | 26 | 16.0 | 74 | 6.80 | 0.0 | 100 | 29.0K |
| JAN. 11 | | | | | | 29 | | 8.0 | | |
| FEB. 8 | | | | | | 37 | | 5.0 | | |
| FEB. 29 | 88 | 41 | 129 | 40 | 20.0 | 62 | 6.70 | 14.0 | 100 | 25.0K |
| APR. 11 | | | | | | 70 | 6.60 | 19.0 | | 25.0 |
| MAY 9 | | | | | | 62 | 6.20 | 17.0 | | 25.0K |
| JUNE 6 | 87 | 14 | 101 | 28 | 20.0 | 91 | 6.40 | | 200 | 25.0K |
| JULY 11 | | | | | | 61 | 8.30 | 22.0 | | 25.0K |
| SEP. 5 | 59 | 20 | 87 | 40 | 24.0 | 103 | 6.70 | 23.0 | 100 | 150.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| NOV. 30 | 4.6 | | 2.5 | | | |
| FEB. 29 | 3.7 | | 4.3 | 300 | 11000 | 32 |
| APR. 11 | 2.7 | | 2.4 | | | |
| MAY 9 | 1.4 | | 3.2 | | | |
| JUNE 6 | 1.8 | | 5.0 | 50 | 200 | 32 |
| JULY 11 | 1.3 | 15.0 | 1.8 | | | |
| SEP. 5 | 0.7 | 8.0 | 1.3 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JUNE 6 | | | | | | | | | 190 |
| SEP. 5 | 10K | 2 | 100K | | 40 | 100K | 2.0K | 50K | 100 |

K Less than.

## 07349457 DOOLEY CREEK NEAR ARKANSAS-LOUISIANA STATE LINE

LOCATION.--Lat 33°01'35", long 93°34'45", in SW¼NE¼ sec.10, T.20 S., R.24 W., Lafayette County, at bridge on county road 0.6 mile north of Arkansas-Louisiana State line, and 5.5 miles east of Arkana.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | 0 | | | | | | | 25 | | |
| NOV. 9 | 0 | | | | | | | | | |
| NOV. 30 | 0.1 | 2500 | 100.0K | 8.0 | 2.9 | 21 | 1K | 46 | 0.400 | 1.000 |
| JAN. 11 | 90 | | | | | | | 18 | | |
| FEB. 8 | 3 | | | | | 10 | | 22 | | |
| FEB. 29 | 0 | 3000 | 400.0 | 12.0 | 9.2 | 34 | 4 | 74 | 0.100K | 0.100 |
| APR. 11 | 0.1 | | | | | 40 | | 92 | | |
| MAY 9 | | | | | | 49 | | 112 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 5 | | | | | | | | 21.0 | | |
| NOV. 30 | 181 | 54 | 235 | 32 | 20.0 | 181 | 6.90 | 8.0 | 120 | 35.0 |
| JAN. 11 | | | | | | 86 | | 10.0 | | |
| FEB. 8 | | | | | | 83 | 6.50 | 5.0 | | 25.0K |
| FEB. 29 | 230 | 42 | 272 | 68 | 30.0 | 250 | 6.70 | 15.0 | 140 | 25.0 |
| APR. 11 | | | | | | 370 | 6.70 | 20.0 | | 25.0K |
| MAY 9 | | | | | | 385 | 6.40 | 19.0 | | 90.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| NOV. 30 | 5.6 | | 2.1 | | | |
| FEB. 8 | 10.0 | | 1.0 | | | |
| FEB. 29 | 5.6 | | 1.4 | 580 | 23000 | 65 |
| APR. 11 | 3.1 | | 1.4 | | | |
| MAY 9 | 5.8 | | 3.2 | | | |

K Less than.

## 07356150 OUACHITA RIVER NEAR WASHITA, ARK.

LOCATION.--Lat 34°37'32", long 93°32'49", in SE¼NE¼ sec.27, T.1 S., R.24 W., Montgomery County, at bridge on State Highway 27, and 2.0 miles south of Washita.

DRAINAGE AREA.--581 sq mi.

PERIOD OF RECORD.--Chemical analyses: August 1969 to June 1972.

REMARKS.--Records collected for Corps of Engineers, Vicksburg, Miss.

### CHEMICAL ANALYSES, OCTOBER 1971 TO JUNE 1972

### FIELD ANALYSES

| DATE | DEPTH (FT) | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | DISSOLVED OXYGEN (MG/L) | PERCENT SATURATION |
|---|---|---|---|---|---|---|
| NOV. | | | | | | |
| 19... | .0 | 58 | 6.6 | 14.5 | 8.6 | 83 |
| 19... | 15 | 58 | 6.6 | 14.5 | 7.8 | 76 |
| 19... | 33 | 64 | 6.4 | 14.5 | 7.0 | 68 |
| DEC. | | | | | | |
| 21... | .0 | 33 | 6.8 | 9.0 | 9.8 | 84 |
| 21... | 20 | 38 | 6.9 | 9.0 | 9.9 | 85 |
| 21... | 40 | 51 | 6.9 | 9.0 | 9.9 | 85 |
| FEB. | | | | | | |
| 11... | .0 | 43 | 7.3 | 5.5 | 12.3 | 98 |
| 11... | 15 | 43 | 7.4 | 5.5 | 12.3 | 98 |
| 11... | 35 | 43 | 7.3 | 5.0 | 12.0 | 94 |
| MAR. | | | | | | |
| 16... | .0 | 52 | 7.3 | 14.0 | 8.8 | 85 |
| 16... | 17 | 49 | 7.2 | 10.0 | 7.6 | 67 |
| 16... | 33 | 47 | 7.2 | 9.5 | 7.4 | 64 |
| APR. | | | | | | |
| 18... | .0 | 59 | 6.7 | 20.0 | 9.2 | 100 |
| 18... | 17 | 56 | 6.3 | 14.5 | 5.5 | 53 |
| 18... | 35 | 54 | 6.2 | 13.5 | 4.0 | 38 |
| MAY | | | | | | |
| 18... | .0 | 45 | 7.3 | 24.0 | 8.5 | 100 |
| 18... | 18 | 45 | 7.2 | 19.0 | 4.0 | 42 |
| 18... | 36 | 62 | 6.7 | 17.0 | 1.0 | 10 |
| JUNE | | | | | | |
| 20... | .0 | 51 | 7.7 | 29.0 | 8.9 | 116 |
| 20... | 17 | 51 | 7.7 | 26.5 | 3.4 | 42 |
| 20... | 34 | 76 | 7.2 | 17.5 | .4 | 0 |

## 07356320 IRONS FORK NEAR FANNIE, ARK.

LOCATION.--Lat 34°41'27", long 93°24'44", in NE¼SE¼ sec.35, T.1 N., R.23 W., Montgomery County, at bridge on State Highway 298, and 2.2 miles east of Fannie.

DRAINAGE AREA.--72.2 sq mi.

PERIOD OF RECORD.--Chemical analyses: August 1969 to June 1972.

REMARKS.--Records collected for Corps of Engineers, Vicksburg, Miss.

### CHEMICAL ANALYSES, OCTOBER 1971 TO JUNE 1972

### FIELD ANALYSES

| DATE | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | DISSOLVED OXYGEN (MG/L) | PERCENT SATURATION |
|---|---|---|---|---|---|
| NOV.<br>19... | 37 | 5.9 | 11.5 | 7.8 | 72 |
| DEC.<br>21... | 32 | 6.9 | 7.5 | 9.8 | 82 |
| FEB.<br>11... | 26 | 7.4 | 5.0 | 12.4 | 97 |
| MAR.<br>16... | 31 | 7.3 | 16.0 | 9.2 | 93 |
| APR.<br>18... | 35 | 6.5 | 20.0 | 8.6 | 93 |
| MAY<br>18... | 35 | 6.3 | 22.0 | 8.3 | 94 |
| JUNE<br>20... | 37 | 7.1 | 30.0 | 8.6 | 132 |

## 07356500 SOUTH FORK OUACHITA RIVER AT MOUNT IDA, ARK.

LOCATION.--Lat 34°33'36", long 93°38'16", in NE¼NE¼ sec.23, T.2 S., R.25 W., Montgomery County, at gaging station near right bank on downstream side of bridge on U.S. Highway 270 at Mount Ida, 3.4 miles upstream from Williams Creek, and at mile 22.5.

DRAINAGE AREA.--64 sq mi.

PERIOD OF RECORD.--Chemical analyses: August 1969 to June 1972.

REMARKS.--Records collected for Corps of Engineers, Vicksburg, Miss.

### CHEMICAL ANALYSES, OCTOBER 1971 TO JUNE 1972

### FIELD ANALYSES

| DATE | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | DISSOLVED OXYGEN (MG/L) | PERCENT SATURATION |
|---|---|---|---|---|---|
| NOV.<br>19... | 170 | 7.0 | 12.0 | 8.2 | 76 |
| DEC.<br>21... | 140 | 7.8 | 8.0 | 10.1 | 85 |
| FEB.<br>11... | 155 | 7.7 | 6.0 | 11.8 | 95 |
| MAR.<br>16... | 183 | 7.8 | 15.0 | 10.0 | 99 |
| APR.<br>18... | 178 | 6.3 | 21.5 | 9.8 | 110 |
| MAY<br>18... | 183 | 7.2 | 21.0 | 8.0 | 89 |
| JUNE<br>20... | 197 | 7.2 | 26.5 | 7.8 | 96 |

## 07357500 LAKE OUACHITA NEAR HOT SPRINGS, ARK.

LOCATION.--Lat 34°34'20", long 93°11'50", in NW¼ sec.12, T.2 S., R.21 W., Garland County, at Blakely Mountain Dam on Ouachita River, 3.0 miles upstream from Glazypeau Creek, 3.8 miles downstream from Mill Creek, 10 miles northwest of Hot Springs, and at mile 487.0.

DRAINAGE AREA.--1,105 sq mi.

PERIOD OF RECORD.--Chemical analyses: August 1969 to June 1972.
Water temperature: May 1965 to June 1972.

REMARKS.--Records collected for Corps of Engineers, Vicksburg, Miss.

### CHEMICAL ANALYSES, OCTOBER 1971 TO JUNE 1972

### FIELD ANALYSES

| DATE | DEPTH (FT) | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | DISSOLVED OXYGEN (MG/L) | PERCENT SATURATION |
|---|---|---|---|---|---|---|
| NOV. | | | | | | |
| 19... | .0 | 57 | 6.6 | 15.5 | 8.6 | 86 |
| 19... | 20 | 56 | 6.5 | 16.0 | 8.4 | 85 |
| 19... | 40 | 56 | 6.6 | 16.0 | 8.4 | 85 |
| 19... | 50 | 55 | 6.5 | 16.0 | 8.4 | 85 |
| 19... | 55 | 54 | 6.5 | 15.5 | 7.8 | 78 |
| 19... | 57 | 54 | 6.2 | 15.0 | 8.0 | 79 |
| 19... | 60 | 53 | 6.1 | 11.5 | 4.4 | 40 |
| 19... | 70 | 53 | 6.2 | 10.0 | 5.4 | 48 |
| 19... | 80 | 53 | 6.2 | 9.0 | 4.8 | 41 |
| 19... | 100 | 54 | 6.2 | 8.0 | 5.0 | 42 |
| 19... | 120 | 54 | 6.3 | 8.0 | 5.0 | 42 |
| 19... | 144 | 56 | 6.2 | 7.0 | 4.0 | 33 |
| DEC. | | | | | | |
| 21... | .0 | 56 | 7.2 | 10.5 | 9.9 | 88 |
| 21... | 10 | 56 | 7.2 | 10.0 | 9.7 | 86 |
| 21... | 20 | 56 | 7.3 | 10.0 | 9.6 | 85 |
| 21... | 30 | 56 | 7.3 | 10.0 | 9.5 | 84 |
| 21... | 40 | 56 | 7.4 | 10.0 | 9.4 | 83 |
| 21... | 50 | 56 | 7.4 | 10.0 | 9.4 | 83 |
| 21... | 60 | 55 | 7.5 | 10.0 | 9.5 | 84 |
| 21... | 70 | 55 | 7.4 | 10.0 | 9.2 | 81 |
| 21... | 80 | 55 | 7.4 | 10.0 | 7.4 | 65 |
| 21... | 85 | 54 | 7.1 | 9.0 | 3.9 | 34 |
| 21... | 90 | 54 | 7.0 | 8.5 | 3.7 | 31 |
| 21... | 100 | 54 | 7.0 | 8.0 | 4.0 | 34 |
| 21... | 110 | 55 | 6.9 | 8.0 | 3.8 | 32 |
| 21... | 120 | 56 | 6.8 | 7.5 | 3.4 | 28 |
| 21... | 130 | 56 | 7.0 | 7.5 | 3.5 | 29 |
| 21... | 140 | 56 | 7.5 | 7.5 | 3.6 | 30 |
| 21... | 150 | 56 | 7.1 | 7.0 | 2.0 | 16 |
| 21... | 160 | 56 | 7.0 | 7.0 | 1.8 | 15 |
| FEB. | | | | | | |
| 11... | .0 | 58 | 7.3 | 8.0 | 8.4 | 70 |
| 11... | 10 | -- | 7.3 | 7.5 | 7.9 | 66 |
| 11... | 20 | 56 | 7.3 | 7.5 | 7.7 | 64 |
| 11... | 30 | 56 | 7.3 | 7.5 | 7.7 | 64 |
| 11... | 40 | 56 | 7.3 | 7.5 | 7.6 | 63 |
| 11... | 50 | 56 | 7.3 | 7.5 | 7.6 | 63 |
| 11... | 60 | 56 | 7.3 | 7.5 | 7.5 | 62 |
| 11... | 70 | 56 | 7.3 | 7.5 | 7.5 | 62 |
| 11... | 80 | 56 | 7.3 | 7.5 | 7.6 | 63 |
| 11... | 90 | 56 | 7.3 | 7.0 | 7.5 | 62 |
| 11... | 100 | 56 | 7.3 | 7.0 | 7.4 | 61 |
| 11... | 110 | 56 | 7.3 | 7.0 | 7.4 | 61 |
| 11... | 120 | 56 | 7.3 | 7.0 | 7.4 | 61 |
| 11... | 140 | 56 | 7.3 | 7.0 | 7.2 | 60 |
| 11... | 150 | 56 | 7.3 | 7.0 | 7.2 | 60 |
| 11... | 160 | 56 | 7.2 | 7.0 | 7.2 | 60 |
| 11... | 165 | 56 | 7.2 | 7.0 | 7.1 | 59 |
| MAR. | | | | | | |
| 16... | .0 | 55 | 7.6 | 12.0 | 10.9 | 101 |
| 16... | 10 | 55 | 7.6 | 11.5 | 11.0 | 101 |
| 16... | 20 | 55 | 7.5 | 11.5 | 11.0 | 101 |
| 16... | 30 | 55 | 7.5 | 11.5 | 10.8 | 99 |
| 16... | 40 | 56 | 7.5 | 10.5 | 11.1 | 99 |
| 16... | 50 | 56 | 7.5 | 9.5 | 10.8 | 94 |
| 16... | 60 | 57 | 7.5 | 8.5 | 10.1 | 86 |
| 16... | 70 | 57 | 7.5 | 8.0 | 9.8 | 82 |
| 16... | 80 | 57 | 7.3 | 7.5 | 9.4 | 78 |
| 16... | 90 | 57 | 7.2 | 7.5 | 8.7 | 72 |
| 16... | 100 | 57 | 7.2 | 7.0 | 8.5 | 70 |
| 16... | 110 | 56 | 7.1 | 7.0 | 8.5 | 70 |
| 16... | 120 | 56 | 7.1 | 7.0 | 8.3 | 68 |
| 16... | 130 | 56 | 7.1 | 7.0 | 8.0 | 66 |
| 16... | 140 | 56 | 7.1 | 7.0 | 6.8 | 56 |
| 16... | 153 | 56 | 7.0 | 7.0 | 4.1 | 34 |

## 07357500 LAKE OUACHITA NEAR HOT SPRINGS, ARK.--continued

### CHEMICAL ANALYSES, OCTOBER 1971 TO JUNE 1972

### FIELD ANALYSES

| DATE | DEPTH (FT) | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | DISSOLVED OXYGEN (MG/L) | PERCENT SATURATION |
|---|---|---|---|---|---|---|
| APR. | | | | | | |
| 19... | .0 | 55 | 6.4 | 18.0 | 10.0 | 104 |
| 19... | 10 | 54 | 6.4 | -- | 10.0 | 103 |
| 19... | 20 | 54 | 6.4 | 16.0 | 10.0 | 101 |
| 19... | 26 | 54 | 6.4 | 15.5 | 10.1 | 101 |
| 19... | 30 | 54 | 6.5 | 14.5 | 10.0 | 97 |
| 19... | 35 | 54 | 6.6 | -- | 9.9 | 95 |
| 19... | 40 | 54 | 6.6 | 12.5 | 9.9 | 92 |
| 19... | 45 | 54 | 6.6 | 10.5 | 9.5 | 85 |
| 19... | 50 | 55 | 6.6 | 9.0 | 9.3 | 80 |
| 19... | 60 | 56 | 6.6 | 8.5 | 9.0 | 76 |
| 19... | 70 | 57 | 6.6 | 8.0 | 8.7 | 73 |
| 19... | 80 | 58 | 6.6 | 8.0 | 8.6 | 72 |
| 19... | 90 | 58 | 6.6 | 8.0 | 8.4 | 70 |
| 19... | 100 | 57 | 6.6 | 7.5 | 8.0 | 67 |
| 19... | 110 | 57 | 6.6 | 7.5 | 8.0 | 67 |
| 19... | 120 | 57 | 6.6 | 7.5 | 7.9 | 66 |
| 19... | 130 | 57 | 6.6 | 7.5 | 7.8 | 65 |
| 19... | 140 | 57 | 6.6 | 7.5 | 7.8 | 65 |
| 19... | 150 | 57 | 6.6 | 7.5 | 7.6 | 63 |
| 19... | 159 | 57 | 6.6 | 7.5 | 7.1 | 59 |
| MAY | | | | | | |
| 18... | .0 | 53 | 7.6 | 22.0 | 8.9 | 101 |
| 18... | 10 | 53 | 7.6 | 22.0 | 8.9 | 101 |
| 18... | 20 | 53 | 7.6 | 20.0 | 9.4 | 102 |
| 18... | 30 | 53 | 7.4 | 16.0 | 9.5 | 96 |
| 18... | 35 | 53 | 7.3 | 13.0 | 9.0 | 85 |
| 18... | 38 | 54 | 7.3 | 11.5 | 8.7 | 80 |
| 18... | 40 | 55 | 7.2 | 11.0 | 8.6 | 78 |
| 18... | 50 | 56 | 7.2 | 9.5 | 8.2 | 71 |
| 18... | 60 | 56 | 7.1 | 8.5 | 8.2 | 69 |
| 18... | 70 | 56 | 7.1 | 8.0 | 8.1 | 68 |
| 18... | 80 | 56 | 7.1 | 8.0 | 8.0 | 67 |
| 18... | 90 | 57 | 7.1 | 7.5 | 7.8 | 65 |
| 18... | 100 | 57 | 7.1 | 7.5 | 7.8 | 65 |
| 18... | 110 | 57 | 7.1 | 7.5 | 7.6 | 63 |
| 18... | 120 | 57 | 7.1 | 7.5 | 7.5 | 62 |
| 18... | 130 | 57 | 7.1 | 7.0 | 7.3 | 60 |
| 18... | 140 | 57 | 7.1 | 7.0 | 7.2 | 60 |
| 18... | 146 | 57 | 7.1 | 7.0 | 6.8 | 56 |
| JUNE | | | | | | |
| 20... | .0 | 55 | 7.8 | 27.0 | 8.4 | 105 |
| 20... | 10 | 54 | 7.9 | 26.0 | 8.5 | 104 |
| 20... | 20 | 54 | 7.9 | 24.0 | 8.8 | 104 |
| 20... | 25 | 54 | 8.0 | 22.0 | 9.7 | 110 |
| 20... | 30 | 54 | 8.1 | 19.5 | 8.4 | 90 |
| 20... | 35 | 54 | 8.1 | 15.5 | 8.3 | 83 |
| 20... | 40 | 54 | 8.1 | 14.0 | 7.9 | 76 |
| 20... | 50 | 56 | 8.1 | 10.0 | 7.3 | 65 |
| 20... | 60 | 56 | 8.1 | 9.0 | 7.1 | 61 |
| 20... | 70 | 57 | 8.0 | 8.5 | 7.2 | 61 |
| 20... | 80 | 57 | 7.9 | 8.0 | 7.1 | 60 |
| 20... | 90 | 57 | 7.9 | 7.5 | 6.9 | 58 |
| 20... | 100 | 58 | 7.8 | 7.5 | 6.8 | 57 |
| 20... | 110 | 58 | 7.8 | 7.5 | 6.6 | 55 |
| 20... | 120 | 58 | 7.8 | 7.5 | 6.5 | 54 |
| 20... | 130 | 58 | 7.8 | 7.5 | 6.4 | 53 |
| 20... | 140 | 58 | 7.7 | 7.5 | 6.2 | 52 |
| 20... | 149 | 58 | 7.7 | 7.5 | 5.8 | 48 |

## 07357501 OUACHITA RIVER AT BLAKELY MOUNTAIN DAM, NEAR HOT SPRINGS, ARK.

LOCATION.--Lat 34°31'17", long 93°11'23", in NE¼ sec.12, T.2 S., R.21 W., Garland County, at gaging station in outlet of power tunnel at Blakely Mountain Dam, 2.3 miles upstream from Glazypeau Creek, 10 miles northwest of Hot Springs, and at mile 486.9.

DRAINAGE AREA.--1,105 sq mi.

PERIOD OF RECORD.--Chemical analyses: August 1969 to June 1972.

REMARKS.--Records collected for Corps of Engineers, Vicksburg, Miss.

### CHEMICAL ANALYSES, OCTOBER 1971 TO JUNE 1972

### FIELD ANALYSES

| DATE | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | DISSOLVED OXYGEN (MG/L) | PERCENT SATURATION |
|---|---|---|---|---|---|
| NOV. 19... | 74 | 6.6 | 11.0 | 10.8 | 98 |
| DEC. 21... | 33 | 7.5 | 9.0 | 10.5 | 90 |
| FEB. 11... | 63 | 7.0 | 9.5 | 10.2 | 89 |
| MAR. 16... | 59 | 7.4 | 10.0 | 9.7 | 86 |
| APR. 19... | 56 | 6.2 | 14.0 | 9.3 | 89 |
| MAY 18... | 62 | 7.1 | 15.0 | 9.4 | 93 |
| JUNE 20... | 65 | 7.4 | 27.0 | 8.1 | 101 |

### ADDITIONAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DISSOLVED ARSENIC (AS) (UG/L) | DISSOLVED CADMIUM (CD) (UG/L) | HEXAVALENT CHROMIUM (CR6) (UG/L) | DISSOLVED COBALT (CO) (UG/L) | DISSOLVED LEAD (PB) (UG/L) | DISSOLVED MERCURY (HG) (UG/L) | DISSOLVED ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|
| DEC. 14... | <10 | 0 | 0 | 0 | 1 | .3 | 0 |

< LESS THAN.

## 07359500 OUACHITA RIVER NEAR MALVERN, ARK.

LOCATION.--Lat 34°23'10", long 92°50'20", in NW¼ sec.16, T.4 S., R.17 W., Hot Spring County, at gaging station near right bank on downstream side of bridge on State Highway 84, 2 miles northwest of Malvern, 5.8 miles downstream from Remmel Dam, and at mile 450.1.

DRAINAGE AREA.--1,562 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1946 to September 1950, October 1970 to September 1972.

REMARKS.--Additional analyses furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | TOTAL ARSENIC (AS) (UG/L) | TOTAL ARSENIC IN BOTTOM DE-POSITS (UG/G) | TOTAL CAD-MIUM (CD) (UG/L) | TOTAL CADMIUM IN BOTTOM DE-POSITS (UG/G) | TOTAL CHRO-MIUM IN BOTTOM DE-POSITS (UG/G) | HEXA-VALENT CHRO-MIUM (CR6) (UG/L) | TOTAL COBALT (CO) (UG/L) |
|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | |
| 01-10 | <10 | -- | 0 | -- | -- | <10 | 0 |
| 11-20 | <10 | -- | 0 | -- | -- | <10 | 0 |
| 21-30 | <10 | -- | 0 | -- | -- | <10 | 0 |
| 31... | <10 | -- | 0 | -- | -- | <10 | 0 |
| NOV. | | | | | | | |
| 01-10 | <10 | -- | 0 | -- | -- | <10 | 0 |
| 11-20 | <10 | -- | 0 | -- | -- | <10 | 0 |
| 21-29 | <10 | -- | 0 | -- | -- | <10 | 0 |
| 30... | <10 | -- | 0 | -- | -- | <10 | 0 |
| DEC. | | | | | | | |
| 01-10 | <10 | -- | 0 | -- | -- | <10 | 0 |
| 11-20 | <10 | -- | 0 | -- | -- | <10 | 0 |
| 21-30 | <10 | -- | 0 | -- | -- | <10 | 0 |
| 31... | <10 | -- | 0 | -- | -- | <10 | 0 |
| FEB. | | | | | | | |
| 24... | -- | 6 | -- | <10 | <10 | -- | -- |

| DATE | TOTAL COBALT IN BOTTOM DE-POSITS (UG/G) | TOTAL LEAD (PB) (UG/L) | TOTAL LEAD IN BOTTOM DE-POSITS (UG/G) | TOTAL MERCURY (HG) (UG/L) | TOTAL MERCURY IN BOTTOM DE-POSITS (UG/G) | TOTAL ZINC (ZN) (UG/L) | TOTAL ZINC IN BOTTOM DE-POSITS (UG/G) |
|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | |
| 01-10 | -- | 0 | -- | <.5 | -- | 0 | -- |
| 11-20 | -- | 0 | -- | <.5 | -- | 0 | -- |
| 21-30 | -- | 0 | -- | <.5 | -- | 0 | -- |
| 31... | -- | 0 | -- | <.5 | -- | 0 | -- |
| NOV. | | | | | | | |
| 01-10 | -- | 0 | -- | <.5 | -- | 0 | -- |
| 11-20 | -- | 0 | -- | <.5 | -- | 0 | -- |
| 21-29 | -- | 0 | -- | <.5 | -- | 0 | -- |
| 30... | -- | 8 | -- | <.5 | -- | 0 | -- |
| DEC. | | | | | | | |
| 01-10 | -- | 2 | -- | <.5 | -- | 0 | -- |
| 11-20 | -- | 2 | -- | <.5 | -- | 0 | -- |
| 21-30 | -- | 3 | -- | <.5 | -- | 0 | -- |
| 31... | -- | 2 | -- | <.5 | -- | 0 | -- |
| FEB. | | | | | | | |
| 24... | 20 | -- | <10 | -- | <.5 | -- | 27 |

< LESS THAN.

## 073[illegible]9500 OUACHITA RIVER NEAR MALVERN, ARK.--continued

### ADDITIONAL CHEMICAL ANLYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 27 | | | | | | 6 | | 27 | | |
| OCT. 28 | 99 | | | | | | | | | |
| NOV. 8 | 1080 | | | | | 3 | | 41 | | |
| NOV. 17 | 275 | | | | | 3 | | 33 | | |
| DEC. 7 | 3666 | 100 | 200.0 | 18.4 | 2.9 | 11 | 25L | 33 | 0.400 | 0.010K |
| DEC. 21 | 9010 | | | | | 21 | | 24 | | |
| JAN. 10 | 936 | | | | | | | | | |
| JAN. 11 | | | | | | 11 | | 15 | | |
| JAN. 16 | 200 | | | | | | | | | |
| JAN. 26 | | | | | | 12 | | 21 | | |
| JAN. 27 | 660 | | | | | | | | | |
| FEB. 16 | 3370 | | | | | 18 | | 20 | | |
| MAR. 7 | 324 | | | 10.4 | 1.9 | 11 | 19 | 17 | 0.700 | 0.620 |
| APR. 12 | 158 | | | | | 7 | | 21 | | |
| MAY 8 | 140 | | | | | 8 | | 32 | | |
| MAY 17 | | | | | | 20 | | 28 | | |
| JUNE 12 | 832 | | | | | | | | | |
| JUNE 13 | | 100 | 100.0 | 11.0 | 3.0 | 8 | 28 | 15 | 3.100 | 0.110 |
| JULY 10 | 117 | | | | | 8 | | 19 | | |
| JULY 24 | 94 | | | | | 16 | | 33 | | |
| AUG. 7 | 105 | | | | | 15 | | 28 | | |
| AUG. 14 | 105 | | | | | 7 | | 26 | | |
| SEP. 18 | 16000 | | | | | 17 | | 20 | | |
| SEP. 25 | 224 | 130 | 170.0 | 18.0 | | 9 | 6 | 22 | 0.820 | 0.020 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 27 | | | | | | 222 | 6.20 | 22.0 | | 25.0K |
| NOV. 8 | | | | | | 235 | 5.90 | 16.0 | | 25.0K |
| NOV. 17 | | | | | | 192 | 5.50 | 15.0 | | 25.0K |
| DEC. 7 | 150 | 19 | 165 | 58 | 46.0 | 172 | 7.10 | 13.0 | 0 | 25.0K |
| DEC. 21 | | | | | | 105 | 7.20 | 14.0 | | 25.0K |
| JAN. 11 | | | | | | 55 | 6.70 | 10.0 | | 25.0K |
| JAN. 26 | | | | | | 222 | 6.80 | 10.0 | | 25.0K |
| FEB. 16 | | | | | | 10 | 6.80 | 11.0 | | 25.0K |
| MAR. 7 | 98 | 5 | 103 | 34 | 26.0 | 111 | 7.70 | 14.0 | 5 | 25.0K |
| APR. 12 | | | | | | 149 | 6.20 | 21.0 | | 25.0K |
| MAY 8 | | | | | | 133 | 6.40 | 20.0 | | 25.0K |
| MAY 17 | | | | | | 202 | 6.70 | 21.0 | | 25.0K |
| JUNE 13 | 46 | 56 | 102 | 40 | 28.0 | 139 | 7.20 | 30.0 | 10 | 25.0K |
| JULY 10 | | | | | | 179 | 7.50 | 28.0 | | 25.0K |
| JULY 24 | | | | | | 136 | 7.20 | 31.0 | | 25.0K |
| AUG. 7 | | | | | | 140 | 6.90 | 29.0 | | 25.0K |
| AUG. 14 | | | | | | 150 | 6.30 | 29.0 | | 25.0K |
| SEP. 18 | | | | | | 139 | 6.80 | 25.0 | | 10.0 |
| SEP. 25 | | | | 56 | 44.0 | 136 | 6.80 | 22.0 | 10 | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 27 | 6.3 | | 1.8 | | | |
| NOV. 8 | 7.0 | | 2.5 | | | |
| NOV. 17 | 6.3 | | 1.7 | | | |
| DEC. 7 | 7.6 | | 4.0 | 80 | 400 | 43 |
| DEC. 21 | 10.8 | | 1.8 | | | |
| JAN. 11 | 10.8 | | 1.7 | | | |
| JAN. 26 | 8.8 | | 0.8 | | | |
| FEB. 16 | 11.9 | | 3.5 | | | |
| MAR. 7 | 10.3 | | 4.6 | | | |
| MAR. 8 | | | | 23 | 255 | 20 |
| APR. 12 | 7.9 | | 2.3 | | | |
| MAY 8 | 7.8 | | 2.5 | | | |
| MAY 17 | 5.6 | | 1.6 | | | |
| JUNE 13 | 9.3 | | 2.1 | | 5450 | 452 |
| JULY 10 | 7.7 | 57.0 | 2.3 | | | |
| JULY 24 | 8.0 | 107.0 | 2.5 | | | |
| AUG. 7 | 6.2 | 79.0 | 1.5 | | | |
| AUG. 14 | 7.4 | 95.0 | 2.5 | | | |
| SEP. 18 | 8.5 | 101.0 | 4.3 | | | |
| SEP. 25 | 5.2 | 59.0 | | | | |
| SEP. 26 | | | | 80 | 1750 | 72 |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JUNE 13 | | 2K | 200K | | 10 | 100K | | 50K | 15 |
| SEP. 25 | | 2K | 50K | | 14 | 100K | 0.3K | 50K | 9 |

K Less than.
L Greater than.

## 07360250 LITTLE MISSOURI RIVER NEAR NEWHOPE, ARK.

LOCATION.--Lat 34°14'25", long 93°50'00", in NW¼NW¼ sec.13, T.6 S., R.27 W., Pike County, at bridge on U.S. Highway 70, and 2.8 miles east of Newhope.

PERIOD OF RECORD.--Chemical analyses: August 1969 to June 1972.

REMARKS.--Records collected for Corps of Engineers, Vicksburg, Miss.

### CHEMICAL ANALYSES, OCTOBER 1971 TO JUNE 1972

### FIELD ANALYSES

| DATE | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | DIS-SOLVED OXYGEN (MG/L) | PER-CENT SATUR-ATION |
|---|---|---|---|---|---|
| OCT. | | | | | |
| 12... | 62 | 7.3 | 19.0 | 8.9 | 95 |
| NOV. | | | | | |
| 18... | 48 | 6.3 | 15.0 | 8.8 | 87 |
| DEC. | | | | | |
| 20... | 33 | 6.8 | 12.0 | 11.5 | 106 |
| FEB. | | | | | |
| 10... | 31 | 7.3 | 6.5 | 12.0 | 98 |
| MAR. | | | | | |
| 17... | 36 | 7.3 | 11.0 | 10.8 | 98 |
| APR. | | | | | |
| 18... | 37 | 6.4 | 21.5 | 9.2 | 103 |
| MAY | | | | | |
| 19... | 44 | 7.7 | 24.0 | 8.6 | 101 |
| JUNE | | | | | |
| 20... | 59 | 7.7 | 30.5 | 8.4 | 110 |

## 07360350 SELF CREEK NEAR DAISY, ARK.

LOCATION.--Lat 34°15'49", long 93°43'40", in NE¼SE¼ sec.36, T.5 S., R.26 W., Pike County, at bridge on county road 1.6 miles north of Daisy.

DRAINAGE AREA.--204 sq mi.

PERIOD OF RECORD.--Chemical analyses: August 1969 to June 1972.

REMARKS.--Records collected for Corps of Engineers, Vicksburg, Miss.

### CHEMICAL ANALYSES, OCTOBER 1971 TO JUNE 1972

### FIELD ANALYSES

| DATE | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | DIS-SOLVED OXYGEN (MG/L) | PER-CENT SATUR-ATION |
|---|---|---|---|---|---|
| OCT. | | | | | |
| 12... | 59 | 7.1 | 18.0 | 7.3 | 76 |
| NOV. | | | | | |
| 18... | 41 | 6.0 | 16.0 | 9.0 | 91 |
| DEC. | | | | | |
| 20... | 33 | 6.9 | 12.5 | 11.2 | 105 |
| FEB. | | | | | |
| 10... | 29 | 7.1 | 7.5 | 11.7 | 98 |
| MAR. | | | | | |
| 17... | 35 | 7.4 | 10.0 | 10.6 | 94 |
| APR. | | | | | |
| 18... | 34 | 6.4 | 20.5 | 8.4 | 92 |
| MAY | | | | | |
| 19... | 41 | 7.7 | 22.0 | 8.7 | 99 |
| JUNE | | | | | |
| 20... | 50 | 7.7 | 28.5 | 7.2 | 92 |

## 07360500 LAKE GREESON NEAR MURFREESBORO, ARK.

LOCATION.--Lat 34°08'55", long 93°42'55", in NW¼ sec.18, T.7 S., R.25 W., Pike County, at Narrows Dam on Little Missouri River, 6.5 miles northwest of Murfreesboro, 9.7 miles upstream from Muddy Fork, and at mile 105.5.

DRAINAGE AREA.--237 sq mi.

PERIOD OF RECORD.--Chemical analyses: August 1969 to June 1972.
Water temperature: May 1965 to May 1968, October 1968 to June 1972.

REMARKS.--Records collected for Corps of Engineers, Vicksburg, Miss.

### CHEMICAL ANALYSES, OCTOBER 1971 TO JUNE 1972

### FIELD ANALYSES

| DATE | DEPTH (FT) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | DIS-SOLVED OXYGEN (MG/L) | PER-CENT SATUR-ATION |
|---|---|---|---|---|---|---|
| OCT. | | | | | | |
| 12... | .0 | 32 | 6.8 | 23.0 | 7.3 | 86 |
| 12... | 10 | 32 | 6.8 | 22.0 | 7.2 | 82 |
| 12... | 20 | 32 | 6.9 | 22.0 | 7.1 | 81 |
| 12... | 25 | 32 | 6.9 | 22.0 | 6.9 | 78 |
| 12... | 28 | 33 | 6.9 | 22.0 | 6.8 | 77 |
| 12... | 30 | 33 | 6.8 | 22.0 | 6.8 | 77 |
| 12... | 35 | 33 | 6.1 | 19.0 | 1.3 | 14 |
| 12... | 40 | 33 | 6.1 | 15.5 | 2.0 | 20 |
| 12... | 50 | 33 | 6.1 | 12.0 | 3.2 | 30 |
| 12... | 60 | 33 | 6.1 | 11.0 | 3.8 | 34 |
| 12... | 80 | 32 | 6.1 | 9.0 | 3.3 | 28 |
| 12... | 100 | 32 | 6.1 | 8.0 | 3.3 | 28 |
| 12... | 120 | 34 | 6.2 | 7.5 | 1.4 | 17 |
| 12... | 130 | 34 | 6.2 | 7.5 | 1.6 | 13 |
| NOV. | | | | | | |
| 18... | .0 | 32 | 6.3 | 17.5 | 8.3 | 86 |
| 18... | 20 | 32 | 6.2 | 17.0 | 7.8 | 80 |
| 18... | 25 | 33 | 6.1 | 16.5 | 7.2 | 73 |
| 18... | 30 | 34 | 6.0 | 16.5 | 6.5 | 66 |
| 18... | 35 | 36 | 6.0 | 16.0 | 6.2 | 63 |
| 18... | 40 | 34 | 6.0 | 16.0 | 5.8 | 58 |
| 18... | 45 | 34 | 5.9 | 15.5 | 4.6 | 46 |
| 18... | 50 | 36 | 5.8 | 12.5 | 1.1 | 10 |
| 18... | 60 | 35 | 5.7 | 11.0 | 2.5 | 23 |
| 18... | 80 | 34 | 5.5 | 10.0 | 2.4 | 21 |
| 18... | 100 | 34 | 5.6 | 8.0 | 3.2 | 27 |
| 18... | 105 | 36 | 5.8 | 8.0 | .9 | 8 |
| DEC. | | | | | | |
| 20... | .0 | 33 | 7.4 | 11.0 | 9.7 | 88 |
| 20... | 10 | 33 | 7.4 | 10.5 | 9.4 | 86 |
| 20... | 20 | 33 | 7.3 | 10.0 | 9.3 | 82 |
| 20... | 30 | 33 | 7.2 | 10.0 | 9.3 | 82 |
| 20... | 40 | 33 | 7.1 | 10.0 | 9.3 | 82 |
| 20... | 50 | 33 | 7.1 | 10.0 | 9.3 | 82 |
| 20... | 60 | 33 | 7.2 | 10.0 | 9.3 | 82 |
| 20... | 70 | 33 | 7.2 | 10.0 | 8.8 | 78 |
| 20... | 80 | 33 | 7.1 | 10.0 | 8.6 | 76 |
| 20... | 85 | 33 | 7.2 | 10.0 | 7.0 | 62 |
| 20... | 90 | 33 | 7.2 | 9.0 | 3.0 | 26 |
| 20... | 100 | 33 | 7.3 | 9.0 | 1.7 | 15 |
| 20... | 110 | 33 | 7.0 | 8.5 | 1.6 | 14 |
| 20... | 120 | 34 | 6.6 | 8.0 | 1.5 | 13 |
| 20... | 130 | 34 | 6.3 | 8.0 | 1.1 | 9 |
| FEB. | | | | | | |
| 10... | .0 | 30 | 7.0 | 7.5 | 9.8 | 82 |
| 10... | 10 | 30 | 7.0 | 7.0 | 9.4 | 78 |
| 10... | 20 | 30 | 7.0 | 7.0 | 9.2 | 76 |
| 10... | 30 | 30 | 7.0 | 7.0 | 9.1 | 75 |
| 10... | 40 | 30 | 6.9 | 7.0 | 9.0 | 74 |
| 10... | 50 | 30 | 6.9 | 7.0 | 9.0 | 74 |
| 10... | 60 | 30 | 7.0 | 7.0 | 9.0 | 74 |
| 10... | 70 | 30 | 7.0 | 7.0 | 8.9 | 74 |
| 10... | 80 | 30 | 6.9 | 7.0 | 8.8 | 73 |
| 10... | 90 | 30 | 6.9 | 7.0 | 8.8 | 73 |
| 10... | 100 | 30 | 6.9 | 7.0 | 8.8 | 73 |
| 10... | 110 | 32 | 6.8 | 7.0 | 7.4 | 61 |
| 10... | 120 | 32 | 6.7 | 7.0 | 7.1 | 59 |
| 10... | 130 | 33 | 6.4 | 7.0 | 1.6 | 13 |
| 10... | 140 | 46 | 6.3 | 7.0 | 1.0 | 8 |
| MAR. | | | | | | |
| 17... | .0 | 35 | 7.0 | 14.5 | 10.4 | 101 |
| 17... | 10 | 34 | 7.0 | 12.0 | 10.3 | 95 |
| 17... | 20 | 32 | 7.0 | 11.5 | 10.0 | 92 |
| 17... | 30 | 32 | 6.9 | 11.0 | 10.0 | 91 |
| 17... | 40 | 31 | 6.9 | 10.0 | 10.0 | 88 |
| 17... | 50 | 30 | 6.9 | 9.0 | 9.9 | 85 |
| 17... | 60 | 30 | 6.9 | 8.5 | 9.7 | 82 |
| 17... | 70 | 30 | 6.9 | 8.5 | 9.6 | 81 |
| 17... | 80 | 30 | 6.8 | 8.0 | 9.6 | 81 |
| 17... | 90 | 30 | 6.8 | 7.5 | 9.5 | 79 |
| 17... | 100 | 30 | 6.8 | 7.0 | 9.2 | 76 |
| 17... | 110 | 30 | 6.8 | 7.0 | 8.6 | 71 |
| 17... | 120 | 30 | 6.9 | 7.0 | 8.0 | 66 |
| 17... | 130 | 31 | 6.9 | 7.0 | 8.0 | 66 |
| 17... | 138 | 31 | 6.9 | 7.0 | 6.2 | 51 |

## 07360500 LAKE GREESON NEAR MURFREESBORO, ARK.--continued

### CHEMICAL ANALYSES, OCTOBER 1971 TO JUNE 1972

### FIELD ANALYSES

| DATE | DEPTH (FT) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | DIS-SOLVED OXYGEN (MG/L) | PER-CENT SATUR-ATION |
|---|---|---|---|---|---|---|
| APR. | | | | | | |
| 18... | .0 | 32 | 6.5 | 18.0 | 9.7 | 101 |
| 18... | 10 | 32 | 6.6 | 17.0 | 9.7 | 100 |
| 18... | 20 | 30 | 6.6 | 16.5 | 9.6 | 98 |
| 18... | 25 | 30 | 6.6 | 15.5 | 9.5 | 95 |
| 18... | 27 | 30 | 6.6 | 14.5 | 9.4 | 91 |
| 18... | 29 | 30 | 6.6 | 13.5 | 9.0 | 86 |
| 18... | 30 | 30 | 6.6 | 13.5 | 8.9 | 85 |
| 18... | 35 | 30 | 6.5 | 12.0 | 8.9 | 82 |
| 18... | 40 | 30 | 6.5 | 11.0 | 8.6 | 78 |
| 18... | 50 | 30 | 6.5 | 10.0 | 8.7 | 77 |
| 18... | 60 | 30 | 6.5 | 9.5 | 8.7 | 76 |
| 18... | 70 | 30 | 6.5 | 9.0 | 8.7 | 75 |
| 18... | 80 | 30 | 6.5 | 8.5 | 8.5 | 72 |
| 18... | 90 | 30 | 6.5 | 8.0 | 8.4 | 70 |
| 18... | 100 | 30 | 6.4 | 7.5 | 8.2 | 68 |
| 18... | 120 | 31 | 6.4 | 7.5 | 7.2 | 60 |
| 18... | 130 | 31 | 6.4 | 7.5 | 6.7 | 56 |
| 18... | 138 | 31 | 6.4 | 7.5 | 6.4 | 53 |
| MAY | | | | | | |
| 19... | .0 | 30 | 8.1 | 23.5 | 8.7 | 101 |
| 19... | 10 | 35 | 7.6 | 23.5 | 8.6 | 100 |
| 19... | 20 | 31 | 7.1 | 20.5 | 9.3 | 103 |
| 19... | 30 | 31 | 6.9 | 16.5 | 8.3 | 85 |
| 19... | 35 | 30 | 6.9 | 14.5 | 8.2 | 80 |
| 19... | 40 | 30 | 6.9 | 13.0 | 8.2 | 77 |
| 19... | 50 | 30 | 6.8 | 11.5 | 8.0 | 73 |
| 19... | 60 | 30 | 6.7 | 10.0 | 8.2 | 72 |
| 19... | 70 | 30 | 6.7 | 9.5 | 8.3 | 72 |
| 19... | 80 | 30 | 6.7 | 9.0 | 8.4 | 72 |
| 19... | 90 | 30 | 6.6 | 8.0 | 8.4 | 70 |
| 19... | 100 | 30 | 6.6 | 8.0 | 7.9 | 66 |
| 19... | 110 | 31 | 6.6 | 7.5 | 7.9 | 66 |
| 19... | 120 | 32 | 6.6 | 7.5 | 6.8 | 57 |
| 19... | 130 | 32 | 6.9 | 7.5 | 5.8 | 48 |
| 19... | 140 | 33 | 7.1 | 7.5 | 3.3 | 28 |
| 19... | 142 | 35 | 7.5 | 7.5 | 3.1 | 26 |
| JUNE | | | | | | |
| 21... | .0 | 32 | 7.8 | 28.0 | 8.0 | 101 |
| 21... | 10 | 31 | 7.8 | 28.0 | 8.0 | 101 |
| 21... | 15 | 30 | 7.8 | 27.5 | 8.2 | 103 |
| 21... | 18 | 30 | 7.8 | 26.5 | 8.3 | 102 |
| 21... | 19 | 30 | 7.9 | 25.0 | 8.7 | 105 |
| 21... | 20 | 30 | 7.9 | 24.5 | 9.0 | 107 |
| 21... | 25 | 30 | 7.9 | 20.0 | 8.5 | 92 |
| 21... | 30 | 30 | 7.6 | 18.0 | 7.2 | 75 |
| 21... | 35 | 31 | 7.2 | 14.5 | 6.1 | 59 |
| 21... | 40 | 31 | 7.1 | 13.0 | 6.3 | 59 |
| 21... | 50 | 31 | 7.1 | 11.0 | 6.3 | 57 |
| 21... | 60 | 31 | 7.2 | 10.0 | 6.5 | 58 |
| 21... | 70 | 31 | 7.2 | 9.5 | 7.0 | 61 |
| 21... | 80 | 31 | 7.2 | 8.5 | 7.1 | 60 |
| 21... | 90 | 31 | 7.1 | 8.0 | 7.2 | 60 |
| 21... | 100 | 31 | 7.0 | 8.0 | 7.8 | 59 |
| 21... | 110 | 31 | 7.0 | 7.5 | 6.3 | 52 |
| 21... | 120 | 32 | 7.0 | 7.5 | 5.1 | 42 |
| 21... | 130 | 33 | 6.9 | 7.5 | 3.3 | 28 |
| 21... | 134 | 36 | 6.6 | 7.5 | 2.4 | 20 |

## 07360501 LITTLE MISSOURI RIVER AT NARROWS DAM, NEAR MURFREESBORO, ARK.

LOCATION.--Lat 34°08'51", long 93°43'04", in NW¼ sec.18, T.7 S., R.25 W., Pike County, at gaging station in powerhouse at Narrows Dam, 6.5 miles northwest of Murfreesboro, 9.5 miles upstream from Muddy Fork Creek, and at mile 105.5.

DRAINAGE AREA.--237 sq mi.

PERIOD OF RECORD.--Chemical analyses: August 1969 to June 1972.

REMARKS.--Flow completely regulated by Lake Greeson since Nov. 30, 1949. Records collected for Corps of Engineers, Vicksburg, Miss.

### CHEMICAL ANALYSES, OCTOBER 1971 TO JUNE 1972

### FIELD ANALYSES

| DATE | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | DISSOLVED OXYGEN (MG/L) | PERCENT SATURATION |
|---|---|---|---|---|---|
| OCT. | | | | | |
| 12... | 32 | 6.6 | 14.0 | 7.5 | 72 |
| NOV. | | | | | |
| 18... | 36 | 5.9 | 13.0 | 5.0 | 47 |
| DEC. | | | | | |
| 20... | 33 | 6.8 | 11.0 | 8.1 | 74 |
| FEB. | | | | | |
| 10... | 32 | 7.0 | 7.0 | 10.0 | 83 |
| APR. | | | | | |
| 18... | 31 | 6.4 | 11.5 | 9.5 | 87 |
| MAY | | | | | |
| 19... | 31 | 7.5 | 13.0 | 8.9 | 84 |
| JUNE | | | | | |
| 21... | 32 | 7.9 | 12.5 | 8.0 | 75 |

## 07362065 OUACHITA RIVER BELOW CAMDEN, ARK.

LOCATION.--Lat 33°29'03", long 92°45'11", in NE¼SE¼ sec.20, T.14 S., R.16 W., Ouachita County, at Frenchport Landing, 7.5 miles southeast of Camden, 6.5 miles downstream from Two Bayou Creek (west), and at mile 339.2.

DRAINAGE AREA.--5,676 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1972.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DIS-SOLVED IRON (FE) (UG/L) | DIS-SOLVED MAN-GANESE (MN) (UG/L) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | DIS-SOLVED SULFATE (SO4) (MG/L) | DIS-SOLVED CHLO-RIDE (CL) (MG/L) | DIS-SOLVED NITRATE (N) (MG/L) | DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L) | ORGANIC NITRO-GEN (N) (MG/L) | TOTAL PHOS-PHORUS (P) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 21... | 220 | 70 | 24 | 0 | 20 | 16 | 16 | 2.1 | -- | -- | .15 |
| DEC. 02... | -- | -- | 22 | 0 | 18 | 40 | 22 | 1.3 | -- | -- | .08 |
| JAN. 07... | 230 | 60 | 28 | 0 | 23 | 20 | 7.1 | .36 | -- | -- | .09 |
| FEB. 11... | -- | -- | 28 | 0 | 23 | 16 | 12 | .36 | -- | -- | .30 |
| MAR. 09... | -- | -- | 20 | 0 | 16 | 15 | 17 | 1.0 | -- | -- | .07 |
| APR. 20... | 490 | 100 | 36 | 0 | 30 | 16 | 14 | .66 | -- | -- | .52 |
| MAY 18... | -- | -- | 28 | 0 | 23 | 14 | 21 | .81 | -- | -- | .11 |
| JUNE 22... | -- | -- | 32 | 0 | 26 | 32 | 20 | .66 | -- | -- | .08 |
| JULY 28... | 130 | 80 | 20 | 0 | 16 | 25 | 22 | .66 | .00 | .12 | .03 |
| AUG. 29... | -- | -- | 28 | 0 | 23 | 16 | 12 | .63 | -- | -- | .07 |

| DATE | TOTAL NON-FILT-RABLE RESIDUE (MG/L) | HARD-NESS (CA,MG) (MG/L) | NON-CAR-BONATE HARD-NESS (MG/L) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) | BIO-CHEM-ICAL OXYGEN DEMAND (MG/L) | IMME-DIATE COLI-FORM (COL. PER 100 ML) | FECAL COLI-FORM (COL. PER 100 ML) | STREP-TOCOCCI (COL-ONIES PER 100 ML) | PHENOLS (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 21... | 12 | 30 | 10 | 157 | 6.3 | 10 | 2.6 | 110 | 67 | 170 | 0 |
| DEC. 02... | 7 | 35 | 17 | 225 | 7.2 | 16 | 2.5 | 860 | E10 | E70 | -- |
| JAN. 07... | 33 | 23 | 0 | 86 | 7.1 | 25 | 2.6 | 3800 | 1300 | 770 | 4 |
| FEB. 11... | 16 | 30 | 7 | 102 | 7.1 | 34 | 2.1 | E1000 | E33 | E20 | -- |
| MAR. 09... | 15 | 29 | 12 | 123 | 7.1 | 16 | 7.4 | E100 | E22 | E16 | -- |
| APR. 20... | 10 | 33 | 4 | 133 | 7.0 | 22 | 1.7 | E50 | E11 | E7 | 0 |
| MAY 18... | 12 | 28 | 5 | 151 | 6.8 | 19 | 3.7 | 1700 | 140 | 14 | -- |
| JUNE 22... | 6 | 40 | 14 | 176 | 7.1 | 17 | 2.6 | E30 | E10 | 9 | -- |
| JULY 28... | 5 | 38 | 22 | 175 | 7.3 | 14 | 1.0 | 1200 | 110 | 33 | -- |
| AUG. 29... | -- | 27 | 4 | 165 | 7.1 | 10 | 2.5 | E50 | E10 | 8 | 4 |

E ESTIMATED.

## 07362065 OUACHITA RIVER BELOW CAMDEN, ARK.--continued

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DIS-SOLVED ARSENIC (AS) (UG/L) | DIS-SOLVED CAD-MIUM (CD) (UG/L) | HEXA-VALENT CHRO-MIUM (CR6) (UG/L) | DIS-SOLVED COBALT (CO) (UG/L) | DIS-SOLVED COPPER (CU) (UG/L) | DIS-SOLVED LEAD (PB) (UG/L) | DIS-SOLVED LITHIUM (LI) (UG/L) | DIS-SOLVED MERCURY (HG) (UG/L) | DIS-SOLVED NICKEL (NI) (UG/L) | DIS-SOLVED SILVER (AG) (UG/L) | DIS-SOLVED ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 21... | -- | 0 | <10 | 0 | 3 | 1 | 0 | <.5 | 0 | 0 | 10 |
| JAN. 07... | 10 | 0 | <10 | 0 | 5 | 1 | 0 | <.5 | 4 | 1 | 10 |
| APR. 20... | <10 | 0 | <10 | 0 | 3 | 0 | -- | <.5 | 0 | -- | 30 |
| JULY 28... | <10 | 0 | <10 | 0 | 1 | 2 | -- | <.5 | 1 | -- | 0 |

### FIELD ANALYSES

| DATE | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | DIS-SOLVED OXYGEN (MG/L) | PER-CENT SATUR-ATION |
|---|---|---|---|---|---|---|---|---|
| OCT. 21... | 25 | 0 | 20 | 152 | 6.8 | 22.0 | 5.0 | 57 |
| DEC. 02... | 20 | 0 | 16 | 236 | 7.0 | 9.5 | 8.3 | 72 |
| JAN. 07... | 28 | 0 | 23 | 85 | 7.0 | 6.0 | 8.8 | 71 |
| FEB. 11... | -- | -- | -- | -- | -- | 7.5 | 11.4 | 95 |
| MAR. 09... | 20 | 0 | 16 | 123 | 7.1 | 11.5 | 8.8 | 81 |
| APR. 20... | 28 | 0 | 23 | 134 | 6.7 | 23.0 | 5.5 | 63 |
| MAY 18... | 20 | 0 | 16 | 150 | 7.0 | 24.5 | 5.3 | 63 |
| JUNE 22... | 34 | 0 | 28 | 181 | 7.2 | 30.0 | 3.3 | 43 |
| JULY 28... | 20 | 0 | 16 | 168 | 7.0 | 32.0 | 5.7 | 77 |
| AUG. 29... | 30 | 0 | 25 | 131 | 7.2 | 28.5 | 5.2 | 67 |

< LESS THAN.

## 07362200 SMACKOVER CREEK NEAR NORPHLET, ARK.

LOCATION.--Lat 33°22'02", long 92°38'52", in NW¼ sec.3, T.16 S., R.15 W., Union County, at bridge on county road 3.5 miles north of Norphlet.

DRAINAGE AREA.--500 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1952 to September 1955, October 1959 to September 1972.
Water temperature: October 1952 to September 1955, October 1959 to July 1960, October 1961 to September 1970.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DIS-SOLVED IRON (FE) (UG/L) | DIS-SOLVED MAN-GANESE (MN) (UG/L) | DIS-SOLVED SODIUM (NA) (MG/L) | DIS-SOLVED PO-TAS-SIUM (K) (MG/L) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | DIS-SOLVED SULFATE (SO4) (MG/L) |
|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | |
| 03... | 1600 | 1310 | 1320 | 18 | 0 | 0 | 0 | -- |
| JAN. | | | | | | | | |
| 06... | 340 | 390 | -- | -- | -- | -- | -- | -- |
| APR. | | | | | | | | |
| 19... | 340 | 860 | 370 | 6.6 | 0 | 0 | 0 | 6.1 |
| JULY | | | | | | | | |
| 27 | 710 | 1400 | -- | -- | -- | -- | -- | -- |

| DATE | DIS-SOLVED CHLO-RIDE (CL) (MG/L) | DIS-SOLVED NITRATE (N) (MG/L) | HARD-NESS (CA,MG) (MG/L) | NON-CAR-BONATE HARD-NESS (MG/L) | PERCENT SODIUM | SODIUM AD-SORP-TION RATIO | PH (UNITS) |
|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | |
| 20... | -- | .04 | -- | -- | -- | -- | 3.7 |
| APR. | | | | | | | |
| 19... | 910 | .52 | 250 | 250 | 76 | 10 | 4.5 |

| DATE | DIS-SOLVED ARSENIC (AS) (UG/L) | DIS-SOLVED CAD-MIUM (CD) (UG/L) | HEXA-VALENT CHRO-MIUM (CR6) (UG/L) | DIS-SOLVED COBALT (CO) (UG/L) | DIS-SOLVED COPPER (CU) (UG/L) | DIS-SOLVED LEAD (PB) (UG/L) | DIS-SOLVED LITHIUM (LI) (UG/L) | DIS-SOLVED MERCURY (HG) (UG/L) | DIS-SOLVED NICKEL (NI) (UG/L) | DIS-SOLVED SILVER (AG) (UG/L) | DIS-SOLVED ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | |
| 20... | -- | 0 | <10 | 25 | 4 | 3 | 90 | 1.1 | 8 | 2 | 310 |
| JAN. | | | | | | | | | | | |
| 06... | -- | 0 | <10 | 0 | 5 | 20 | -- | <.5 | 5 | 1 | 30 |
| APR. | | | | | | | | | | | |
| 19... | <10 | 0 | <10 | 10 | 6 | 0 | -- | <.5 | 5 | -- | 40 |
| JULY | | | | | | | | | | | |
| 27... | <10 | 0 | <10 | 10 | 1 | 3 | -- | <.5 | 7 | -- | 10 |

| DATE | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | DATE | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) |
|---|---|---|---|
| OCT. | | MAR. | |
| 03... | 6120 | 26... | 2010 |
| 10... | 6750 | APR. | |
| 17... | 8320 | 03... | 962 |
| 20... | 9150 | 09... | 981 |
| 24... | 7700 | 16... | 2410 |
| 31... | 19100 | 19... | 2320 |
| NOV. | | 23... | 3500 |
| 07... | 9100 | MAY | |
| 14... | 7890 | 01... | 1840 |
| 23... | 4290 | 07... | 940 |
| 30... | 5680 | 14... | 2350 |
| DEC. | | 22... | 2810 |
| 07... | 2890 | JUNE | |
| 12... | 3240 | 05... | 3710 |
| 20... | 1600 | 26... | 2000 |
| 28... | 9790 | JULY | |
| JAN. | | 05... | 2730 |
| 04... | 910 | 10... | 4420 |
| 09... | 613 | 20... | 4480 |
| 18... | 1970 | 23... | 3880 |
| 26... | 1890 | AUG. | |
| 31... | 268 | 04... | 5060 |
| FEB. | | 11... | 5720 |
| 14... | 1060 | 23... | 8600 |
| 20... | 2210 | 25... | 10400 |
| 27... | 1630 | SEP. | |
| MAR. | | 02... | 11900 |
| 05... | 899 | 13... | 11900 |
| 12... | 1240 | 20... | 18000 |
| 19... | 1240 | 23... | 8780 |

| DATE | TEMPER-ATURE (DEG C) | DATE | TEMPER-ATURE (DEG C) |
|---|---|---|---|
| OCT. | | | |
| 03... | 24.0 | | |
| 10... | 18.0 | APR. | |
| 17... | 22.0 | 03... | 16.5 |
| 20... | 21.5 | 09... | 17.0 |
| 31... | 19.5 | 16... | 21.0 |
| NOV. | | 19... | 23.0 |
| 07... | 18.0 | 23... | 20.0 |
| 14... | 12.0 | MAY | |
| 23... | 8.5 | 01... | 17.0 |
| 30... | 8.5 | 07... | 19.0 |
| DEC. | | 14... | 20.0 |
| 12... | 11.5 | 22... | 21.5 |
| 20... | 8.5 | JUNE | |
| JAN. | | 05... | 26.5 |
| 04... | 10.0 | 26... | 26.5 |
| 06... | 6.5 | JULY | |
| 09... | 7.0 | 05... | 23.0 |
| 18... | 5.5 | 10... | 24.0 |
| 25... | 13.0 | 20... | 24.0 |
| 31... | 7.0 | 23... | 24.5 |
| FEB. | | AUG. | |
| 07... | 13.0 | 04... | 24.5 |
| 14... | 13.0 | 11... | 25.5 |
| 20... | 10.0 | 23... | 22.5 |
| 27... | 13.0 | 25... | 26.5 |
| MAR. | | SEP. | |
| 05... | 11.5 | 02... | 22.0 |
| 12... | 14.5 | 13... | 26.5 |
| 19... | 12.0 | 20... | 26.5 |
| 26... | 14.0 | 23... | 26.5 |

< LESS THAN.

## 07362400 OUACHITA RIVER AT LOCK AND DAM 8, NEAR CALION, ARK.

LOCATION.--Lat 33°19'14", long 92°27'19", in sec.29, T.16 S., R.13 W., Union County, at south end on upstream side, at Lock and Dam 8, 7 miles southeast of Calion.

PERIOD OF RECORD.--Chemical analyses: January to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, JANUARY TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| JAN. 25 | | 300 | 100.0K | 11.2 | 2.4 | 18 | 9 | 47 | 0.200 | 0.050 |
| FEB. 22 | | | | | | 20 | | 46 | | |
| MAR. 14 | | | | | | 18 | | 80 | | |
| APR. 25 | | | | 16.8 | 4.4 | 17 | 10 | 102 | 0.500 | 0.060 |
| MAY 22 | | | | | | 14 | | 95 | | |
| JUNE 20 | | | | | | 12 | | 90 | | |
| JULY 25 | | 525 | 270.0 | 12.8 | 1.5 | 28 | 29 | 68 | 0.800 | 0.060 |
| AUG. 22 | | | | | | 21 | | 25 | | |
| SEP. 19 | | | | | | 19 | | 23 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| JAN. 25 | 135 | 22 | 157 | 38 | 28.0 | 165 | 7.00 | 13.0 | 20 | 25.0 |
| FEB. 22 | | | | | | 181 | 7.00 | | | 25.0K |
| MAR. 14 | | | | | | 280 | 7.10 | 15.0 | | 25.0K |
| APR. 25 | 224 | 27 | 251 | 60 | 42.0 | 299 | 6.80 | 25.0 | 50 | 25.0K |
| MAY 22 | | | | | | 355 | 6.50 | 32.0 | | 25.0K |
| JUNE 20 | | | | | | 385 | 6.40 | 31.0 | | 25.0K |
| JULY 25 | 172 | 34 | 206 | 38 | 32.0 | 280 | 7.20 | 23.0 | 80 | 25.0K |
| AUG. 22 | | | | | | 169 | 6.90 | 31.0 | | 10.0 |
| SEP. 19 | | | | | | 145 | 6.80 | 29.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| JAN. 25 | 9.4 | | 1.5 | | | |
| FEB. 22 | 10.0 | | 1.5 | | | |
| MAR. 14 | 7.4 | | 3.2 | | | |
| APR. 25 | 5.0 | | 1.1 | | | |
| MAY 22 | 8.6 | | 4.5 | | | |
| JUNE 20 | 6.2 | | 2.7 | | | |
| JULY 25 | 3.4 | 39.0 | 3.0 | | | |
| AUG. 22 | 6.0 | | 2.2 | | | |
| SEP. 19 | 5.8 | | 1.4 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JUNE 28 | | 20K | 100K | | 10K | 100K | | 30K | |
| JULY 25 | | 8 | 100K | | 30 | 80K | 0.4K | 30K | 51 |

K Less than.

## 07363300 HURRICANE CREEK NEAR SHERIDAN, ARK.

LOCATION.--Lat 34°19'10", long 92°20'40", in NW¼NE¼ sec.6, T.5 S., R.12 W., Grant County, at gaging station on downstream side of bridge on U.S. Highway 270, 2.8 miles downstream from Simpson Creek, 3.5 miles east of Sheridan, and at mile 16.9.

DRAINAGE AREA.--204 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1949 to September 1955, October 1967 to September 1972. Water temperature: October 1949 to September 1955.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | INSTANTANEOUS DISCHARGE (CFS) | DISSOLVED SILICA (SIO2) (MG/L) | DISSOLVED ALUMINUM (AL) (UG/L) | DISSOLVED IRON (FE) (UG/L) | DISSOLVED MANGANESE (MN) (UG/L) | DISSOLVED SODIUM (NA) (MG/L) | DISSOLVED POTASSIUM (K) (MG/L) | BICARBONATE (HCO3) (MG/L) | CARBONATE (CO3) (MG/L) | ALKALINITY AS CACO3 (MG/L) | DISSOLVED SULFATE (SO4) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 14... | 2.1 | -- | 100 | 60 | 50 | 110 | 5.0 | 96 | 0 | 79 | 210 |
| JAN. 26... | 184 | -- | 100 | 30 | 230 | -- | -- | -- | -- | -- | -- |
| APR. 07... | 79 | -- | 300 | 80 | 0 | 19 | 2.4 | 24 | 0 | 20 | 49 |
| JULY 19... | 1.3 | 9.7 | 16000 | 120 | 9000 | -- | -- | -- | -- | -- | -- |

| DATE | DISSOLVED CHLORIDE (CL) (MG/L) | DISSOLVED FLUORIDE (F) (MG/L) | DISSOLVED NITRATE (N) (MG/L) | HARDNESS (CA,MG) (MG/L) | NON-CARBONATE HARDNESS (MG/L) | PERCENT SODIUM | SODIUM ADSORPTION RATIO | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | COLOR (PLATINUM-COBALT UNITS) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 14... | 7.1 | 1.9 | .00 | 63 | 0 | 78 | 6.0 | 690 | 7.5 | 10 |
| JAN. 26... | -- | .7 | -- | -- | -- | -- | -- | -- | -- | -- |
| APR. 07... | 5.6 | .6 | .16 | 46 | 26 | 46 | 1.2 | 183 | 7.2 | 20 |
| JULY 19... | -- | 7.3 | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | DISSOLVED ARSENIC (AS) (UG/L) | DISSOLVED CADMIUM (CD) (UG/L) | HEXAVALENT CHROMIUM (CR6) (UG/L) | DISSOLVED COBALT (CO) (UG/L) | DISSOLVED COPPER (CU) (UG/L) | DISSOLVED LEAD (PB) (UG/L) | DISSOLVED LITHIUM (LI) (UG/L) | DISSOLVED MERCURY (HG) (UG/L) | DISSOLVED NICKEL (NI) (UG/L) | DISSOLVED SILVER (AG) (UG/L) | DISSOLVED ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 14... | 10 | 1 | <10 | 0 | 2 | 3 | 10 | 1.1 | 2 | 2 | 30 |
| JAN. 26... | -- | 0 | <10 | 0 | 3 | 4 | -- | <.5 | 4 | -- | 0 |
| APR. 07... | <10 | 0 | <10 | 0 | 5 | 0 | -- | <.5 | 2 | -- | 10 |
| JULY 19... | <10 | 2 | <10 | 32 | 3 | 2 | -- | <.5 | 74 | -- | 250 |

### FIELD ANALYSES

| DATE | INSTANTANEOUS DISCHARGE (CFS) | BICARBONATE (HCO3) (MG/L) | CARBONATE (CO3) (MG/L) | ALKALINITY AS CACO3 (MG/L) | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | DISSOLVED OXYGEN (MG/L) | PERCENT SATURATION |
|---|---|---|---|---|---|---|---|---|---|
| OCT. 14... | 2.1 | 108 | 0 | 88 | 690 | 8.2 | 17.5 | 9.7 | 100 |
| JAN. 26... | 184 | -- | -- | -- | 175 | -- | -- | -- | -- |
| APR. 07... | 79 | 20 | 0 | 16 | 185 | 7.2 | 17.0 | 7.4 | 76 |
| JULY 19... | 1.3 | -- | -- | -- | -- | -- | -- | -- | -- |

< LESS THAN.

### 07363300 HURRICANE CREEK NEAR SHERIDAN, ARK.--continued

### SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 775 | 775 | 775 | 820 | 820 | 820 | 650 | 610 | 625 | 290 | 255 | 275 |
| 2 | 775 | 775 | 775 | 820 | 820 | 820 | 925 | 650 | 795 | 200 | 190 | 210 |
| 3 | 775 | 775 | 775 | 825 | 820 | 820 | 960 | 925 | 940 | 190 | 160 | 175 |
| 4 | 775 | 775 | 775 | 820 | 820 | 820 | 950 | 750 | 800 | 160 | 130 | 145 |
| 5 | 775 | 765 | 775 | 820 | 820 | 820 | 750 | 525 | 640 | 130 | 125 | 125 |
| 6 | 770 | 760 | 765 | 820 | 780 | 810 | 670 | 525 | 590 | 125 | 125 | 125 |
| 7 | 770 | 765 | 770 | 780 | 740 | 760 | 670 | 440 | 555 | 130 | 125 | 125 |
| 8 | 775 | 770 | 772 | 740 | 700 | 720 | 550 | 360 | 465 | 135 | 130 | 130 |
| 9 | 775 | 775 | 775 | 700 | 700 | 700 | 600 | 325 | 480 | 150 | 140 | 145 |
| 10 | 775 | 775 | 775 | 775 | 700 | 740 | 300 | 105 | 160 | 160 | 150 | 155 |
| 11 | 775 | 775 | 775 | 780 | 775 | 775 | 105 | 100 | 100 | 175 | 160 | 165 |
| 12 | 775 | 770 | 775 | 785 | 780 | 785 | 135 | 100 | 115 | 175 | 175 | 175 |
| 13 | 775 | 755 | 765 | 785 | 720 | 740 | 155 | 135 | 145 | 185 | 175 | 180 |
| 14 | 755 | 690 | 750 | 720 | 720 | 720 | 170 | 155 | 165 | 190 | 185 | 185 |
| 15 | 700 | 690 | 695 | 750 | 720 | 735 | 200 | 170 | 185 | 190 | 190 | 190 |
| 16 | 690 | 640 | 675 | 790 | 750 | 770 | 200 | 150 | 165 | 190 | 190 | 190 |
| 17 | 645 | 630 | 633 | --- | --- | --- | --- | --- | --- | 190 | 180 | 185 |
| 18 | 650 | 630 | 635 | 850 | 800 | 825 | --- | --- | --- | 180 | 175 | 180 |
| 19 | 680 | 560 | 600 | 800 | 790 | 795 | --- | --- | --- | 175 | 175 | 175 |
| 20 | 575 | 575 | 575 | 800 | 750 | 785 | --- | --- | --- | 175 | 175 | 175 |
| 21 | 645 | 575 | 628 | 800 | 620 | 725 | 285 | 285 | 285 | 175 | 175 | 175 |
| 22 | 645 | 580 | 562 | 620 | 495 | 545 | 295 | 285 | 295 | 175 | 175 | 175 |
| 23 | 640 | 495 | 508 | 500 | 490 | 495 | 295 | 270 | 280 | 175 | 175 | 175 |
| 24 | 710 | 645 | 670 | 750 | 500 | 625 | 270 | 270 | 270 | 175 | 170 | 170 |
| 25 | 740 | 710 | 730 | 790 | 750 | 780 | 280 | 270 | 275 | 170 | 170 | 170 |
| 26 | 740 | 550 | 600 | 790 | 775 | 785 | 280 | 280 | 280 | 180 | 175 | 175 |
| 27 | 560 | 520 | 535 | 775 | 725 | 750 | 280 | 270 | 275 | 180 | 180 | 180 |
| 28 | 740 | 560 | 655 | 775 | 725 | 740 | 275 | 255 | 260 | 180 | 125 | 145 |
| 29 | 820 | 740 | 800 | 775 | 740 | 765 | 255 | 250 | 250 | 125 | 125 | 125 |
| 30 | 820 | 820 | 820 | 740 | 620 | 670 | 275 | 255 | 265 | 125 | 125 | 125 |
| 31 | 825 | 820 | 820 | --- | --- | --- | 275 | 255 | 265 | 130 | 125 | 126 |
| MONTH | 825 | 495 | 708 | 850 | 490 | 746 | 960 | 100 | 368 | 290 | 125 | 166 |

| | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 135 | 130 | 132 | 260 | 240 | 250 | 220 | 220 | 220 | 135 | 120 | 128 |
| 2 | 135 | 135 | 135 | 240 | 150 | 180 | 220 | 220 | 220 | 140 | 125 | 130 |
| 3 | 175 | 135 | 148 | 185 | 135 | 150 | 220 | 220 | 220 | 152 | 125 | 135 |
| 4 | 180 | 175 | 176 | 182 | 170 | 175 | 220 | 200 | 220 | 140 | 140 | 140 |
| 5 | 180 | 180 | 180 | 210 | 185 | 200 | 200 | 180 | 195 | 160 | 140 | 150 |
| 6 | 190 | 180 | 185 | 210 | 210 | 210 | 295 | 200 | 253 | 182 | 160 | 175 |
| 7 | 190 | 190 | 190 | 210 | 210 | 210 | --- | --- | --- | 190 | 182 | 185 |
| 8 | 220 | 190 | 200 | 210 | 210 | 210 | --- | --- | --- | 220 | 190 | 215 |
| 9 | 222 | 220 | 220 | 225 | 210 | 220 | --- | --- | --- | 240 | 230 | 235 |
| 10 | 220 | 220 | 220 | 240 | 225 | 235 | --- | --- | --- | 275 | 240 | 253 |
| 11 | 220 | 200 | 210 | 245 | 240 | 242 | --- | --- | --- | 280 | 275 | 275 |
| 12 | 200 | 200 | 200 | 250 | 245 | 248 | --- | --- | --- | 295 | 280 | 282 |
| 13 | 200 | 200 | 200 | 242 | 242 | 242 | --- | --- | --- | 290 | 260 | 278 |
| 14 | 200 | 200 | 200 | 240 | 240 | 240 | 230 | 220 | 225 | 260 | 260 | 260 |
| 15 | 200 | 195 | 198 | 240 | 240 | 240 | 230 | 208 | 216 | 270 | 260 | 265 |
| 16 | 195 | 195 | 195 | 240 | 240 | 240 | 230 | 208 | 216 | 310 | 270 | 285 |
| 17 | 195 | 195 | 195 | 240 | 240 | 240 | 310 | 230 | 280 | 330 | 310 | 320 |
| 18 | 195 | 195 | 195 | 240 | 240 | 240 | 310 | 310 | 310 | 342 | 330 | 335 |
| 19 | 230 | 195 | 215 | 240 | 240 | 240 | 310 | 270 | 285 | --- | --- | --- |
| 20 | 230 | 230 | 230 | 240 | 240 | 240 | 270 | 218 | 240 | --- | --- | --- |
| 21 | 230 | 225 | 225 | 240 | 240 | 240 | 220 | 218 | 220 | --- | --- | --- |
| 22 | 230 | 225 | 225 | 250 | 240 | 245 | 230 | 220 | 225 | --- | --- | --- |
| 23 | 230 | 220 | 225 | 250 | 250 | 250 | 250 | 230 | 240 | --- | --- | --- |
| 24 | 220 | 220 | 220 | 250 | 250 | 250 | 250 | 242 | 248 | --- | --- | --- |
| 25 | 220 | 220 | 220 | 275 | 250 | 265 | 240 | 240 | 240 | --- | --- | --- |
| 26 | 225 | 220 | 222 | 290 | 260 | 275 | 240 | 230 | 235 | --- | --- | --- |
| 27 | 230 | 222 | 225 | 260 | 230 | 250 | 250 | 230 | 245 | --- | --- | --- |
| 28 | 230 | 230 | 230 | 230 | 220 | 225 | 252 | 222 | 240 | --- | --- | --- |
| 29 | 225 | 225 | 225 | 220 | 220 | 220 | 282 | 120 | 168 | --- | --- | --- |
| 30 | --- | --- | --- | 220 | 220 | 220 | 120 | 105 | 110 | --- | --- | --- |
| 31 | --- | --- | --- | 220 | 220 | 220 | --- | --- | --- | --- | --- | --- |
| MONTH | 230 | 130 | 201 | 290 | 135 | 229 | --- | --- | --- | --- | --- | --- |

## 07363300 HURRICANE CREEK NEAR SHERIDAN, ARK.--continued

### SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 650 | 650 | 650 |
| 2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 650 | 650 | 650 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 650 | 650 | 650 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 650 | 650 | 650 |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 645 | 620 | 630 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 620 | 620 | 620 |
| 7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 620 | 620 | 620 |
| 8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 620 | 620 | 620 |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 620 | 620 | 620 |
| 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 620 | 620 | 620 |
| 11 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 620 | 620 | 620 |
| 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 610 | 610 | 610 |
| 13 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 610 | 575 | 580 |
| 14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 575 | 575 | 575 |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 645 | 575 | 610 |
| 16 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 660 | 650 | 655 |
| 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 660 | 660 | 660 |
| 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 660 | 650 | 655 |
| 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 650 | 650 | 650 |
| 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 650 | 645 | 645 |
| 21 | --- | --- | --- | --- | --- | --- | 760 | 750 | 755 | 645 | 645 | 645 |
| 22 | --- | --- | --- | --- | --- | --- | 750 | 748 | 749 | 690 | 645 | 660 |
| 23 | --- | --- | --- | --- | --- | --- | 748 | 725 | 730 | 690 | 610 | 660 |
| 24 | --- | --- | --- | --- | --- | --- | 725 | 725 | 725 | 680 | 490 | 595 |
| 25 | --- | --- | --- | --- | --- | --- | 725 | 725 | 725 | 860 | 680 | 725 |
| 26 | --- | --- | --- | --- | --- | --- | 725 | 650 | 680 | 940 | 860 | 920 |
| 27 | --- | --- | --- | --- | --- | --- | 650 | 650 | 650 | 940 | 860 | 900 |
| 28 | --- | --- | --- | --- | --- | --- | 650 | 650 | 650 | 990 | 860 | 960 |
| 29 | --- | --- | --- | --- | --- | --- | 650 | 645 | 645 | 990 | 940 | 960 |
| 30 | --- | --- | --- | --- | --- | --- | 645 | 645 | 645 | --- | --- | --- |
| 31 | --- | --- | --- | --- | --- | --- | 645 | 645 | 645 | --- | --- | --- |
| MONTH | --- | --- | --- | --- | --- | --- | --- | --- | --- | 990 | 490 | 676 |

## 07364012 SALINE RIVER NEAR FOUNTAIN HILL, ARK.

LOCATION.--Lat 33°22'42", long 91°57'32", in sec.30, T.15 S., R.8 W., Ashley County, at bridge on State Highway 160, 3 miles west of Fountain Hill.

PERIOD OF RECORD.--Chemical analyses: January to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, JANUARY TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| JAN. 25 | | 300 | 100.0 | 9.6 | 2.4 | 20 | 15 | 6 | 0.100K | 0.050 |
| FEB. 22 | | | | | | 21 | | 7 | | |
| MAR. 14 | | | | | | 17 | | 10 | | |
| APR. 25 | | | | 11.2 | 3.9 | 30 | 12 | 8 | 0.100 | 0.120 |
| MAY 23 | | | | | | 26 | | 7 | | |
| JUNE 20 | | | | | | 25 | | 7 | | |
| JULY 25 | | 50 | 180.0 | 16.8 | 4.4 | 48 | 23 | 7 | 0.100K | 0.010 |
| AUG. 22 | | | | | | 26 | | 7 | | |
| SEP. 19 | | | | | | 18 | | 8 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| JAN. 25 | 94 | 21 | 115 | 34 | 24.0 | 90 | 6.30 | 10.0 | 30 | 25.0K |
| FEB. 22 | | | | | | 99 | 7.10 | 8.0 | | 25.0K |
| MAR. 14 | | | | | | 101 | 7.20 | 16.0 | | 25.0K |
| APR. 25 | 93 | 23 | 116 | 44 | 28.0 | 101 | 6.80 | 20.0 | 60 | 25.0K |
| MAY 23 | | | | | | 96 | 6.90 | 27.0 | | 25.0K |
| JUNE 20 | | | | | | 103 | 6.80 | 29.0 | | 25.0K |
| JULY 25 | 68 | 23 | 91 | 42 | 24.0 | 104 | 7.00 | 32.0 | 5 | 25.0K |
| AUG. 22 | | | | | | 125 | 7.40 | 30.0 | | 10.0 |
| SEP. 19 | | | | | | 77 | 7.00 | 28.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| JAN. 25 | 9.9 | | 0.9 | 7 | 193 | 10 |
| FEB. 22 | 10.8 | | 1.0 | | | |
| MAR. 14 | 8.2 | | 0.4 | | | |
| APR. 25 | 7.3 | | 6.8 | | 2300 | 4 |
| MAY 23 | 8.0 | | 1.7 | | | |
| JUNE 20 | 8.0 | | 1.3 | | | |
| JULY 25 | 8.6 | 116.0 | 2.4 | 24 | 550 | 16 |
| AUG. 22 | 8.5 | | 1.5 | | | |
| SEP. 19 | 7.2 | | 2.3 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JULY 25 | | 4 | 100K | | 15 | 300 | 0.1K | 30K | 36 |

K Less than.

## 07364080 OUACHITA RIVER NEAR FELSENTHAL, ARK.

LOCATION.--Lat 33°01'55", long 92°05'15", in NE¼ sec.25, T.19 S., R.10 W., Union County, at Corps of Engineers Lock No. 6, 3 miles south of Felsenthal.

DRAINAGE AREA.--10,787 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1949 to September 1972.
Water temperature: October 1949 to September 1972.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 1,190 micromhos July 22; minimum daily, 82 micromhos Jan. 12.
Water temperature: Maximum, 33.0°C Aug. 6, 7; minimum, 3.5°C Jan. 29, 30, 31.

Period of record:
Specific conductance: Maximum daily, 7,610 micromhos Oct. 7, 1954; minimum daily, 44 micromhos May 19, 1958.
Water temperature: Maximum, 37.0°C July 11, 1969; minimum, freezing point Feb. 8, 12, 13, 1958, Dec. 22, Jan. 12, 1970.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | MEAN DIS-CHARGE (CFS) | DIS-SOLVED IRON (FE) (UG/L) | DIS-SOLVED MAN-GANESE (MN) (UG/L) | DIS-SOLVED SODIUM (NA) (MG/L) | DIS-SOLVED PO-TAS-SIUM (K) (MG/L) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | DIS-SOLVED SULFATE (SO4) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | |
| 20... | 1390 | 310 | 160 | 75 | 5.0 | 22 | 0 | 18 | 20 |
| FEB. | | | | | | | | | |
| 10... | 14700 | 230 | 80 | -- | -- | -- | -- | -- | -- |
| APR. | | | | | | | | | |
| 19... | 4280 | 740 | 240 | 33 | 3.0 | 20 | 0 | 16 | 13 |
| JULY | | | | | | | | | |
| 27... | 1080 | 240 | 20 | -- | -- | -- | -- | -- | -- |

| DATE | DIS-SOLVED CHLO-RIDE (CL) (MG/L) | DIS-SOLVED NITRATE (N) (MG/L) | HARD-NESS (CA,MG) (MG/L) | NON-CAR-BONATE HARD-NESS (MG/L) | PERCENT SODIUM | SODIUM AD-SORP-TION RATIO | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) |
|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | |
| 20... | 150 | 1.1 | -- | -- | -- | -- | 550 | 6.8 |
| FEB. | | | | | | | | |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- |
| APR. | | | | | | | | |
| 19... | 64 | .61 | 46 | 30 | 59 | 2.1 | -- | 6.8 |
| JULY | | | | | | | | |
| 27... | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | DIS-SOLVED ARSENIC (AS) (UG/L) | DIS-SOLVED CAD-MIUM (CD) (UG/L) | HEXA-VALENT CHRO-MIUM (CR6) (UG/L) | DIS-SOLVED COBALT (CO) (UG/L) | DIS-SOLVED COPPER (CU) (UG/L) | DIS-SOLVED LEAD (PB) (UG/L) | DIS-SOLVED LITHIUM (LI) (UG/L) | DIS-SOLVED MERCURY (HG) (UG/L) | DIS-SOLVED NICKEL (NI) (UG/L) | DIS-SOLVED SILVER (AG) (UG/L) | DIS-SOLVED ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | |
| 20... | 10 | 0 | <10 | 0 | 2 | 0 | 0 | .6 | 3 | 2 | 30 |
| FEB. | | | | | | | | | | | |
| 10... | -- | 0 | <10 | 0 | 3 | 1 | -- | <.5 | 3 | -- | 0 |
| APR. | | | | | | | | | | | |
| 19... | 12 | 0 | <10 | 0 | 5 | 0 | -- | .7 | 2 | -- | 10 |
| JULY | | | | | | | | | | | |
| 27... | <10 | 0 | <10 | 0 | 2 | 2 | -- | <.5 | 0 | -- | 0 |

### FIELD ANALYSES

| DATE | MEAN DIS-CHARGE (CFS) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | DIS-SOLVED OXYGEN (MG/L) | PER-CENT SATUR-ATION |
|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | |
| 20... | 1390 | 38 | 0 | 31 | 584 | 6.6 | 24.0 | 5.3 | 62 |
| FEB. | | | | | | | | | |
| 10... | 14700 | -- | -- | -- | -- | -- | 7.5 | -- | -- |
| APR. | | | | | | | | | |
| 19... | 4280 | 18 | 0 | 15 | -- | 6.4 | 22.0 | 6.0 | 68 |

< LESS THAN.

## 07364080 OUACHITA RIVER NEAR FELSENTHAL, ARK.--continued

### SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 465 | 557 | 682 | 186 | 282 | 264 | 417 | 382 | 430 | 501 | 531 | 216 |
| 2 | 443 | 546 | 931 | 215 | 200 | 234 | 272 | 376 | 416 | 461 | 428 | 192 |
| 3 | 429 | 537 | 578 | 205 | 184 | 427 | 223 | 342 | 406 | 468 | 387 | 193 |
| 4 | 436 | 547 | 456 | 262 | 179 | 252 | 187 | 331 | 438 | 405 | 366 | 209 |
| 5 | 450 | 604 | 449 | 206 | 176 | 345 | 190 | 562 | 487 | 442 | 381 | 279 |
| 6 | 479 | 642 | 425 | 144 | 182 | 287 | 253 | 677 | 421 | 426 | 347 | 329 |
| 7 | 529 | 641 | 537 | --- | 189 | 256 | 253 | 352 | 431 | 373 | 350 | 363 |
| 8 | 561 | 596 | 491 | 134 | 185 | 222 | 266 | 292 | 371 | 403 | 326 | 298 |
| 9 | 576 | 597 | 623 | 122 | 188 | 208 | 438 | 327 | 372 | 461 | 327 | 298 |
| 10 | 604 | 587 | 487 | 119 | 199 | 271 | 328 | 194 | 348 | 611 | 343 | 274 |
| 11 | 596 | 536 | 508 | 118 | 212 | 212 | 313 | 176 | 312 | 566 | 348 | 267 |
| 12 | 567 | 485 | 276 | 82 | 199 | 201 | 298 | 204 | 305 | 510 | 315 | 227 |
| 13 | 505 | 440 | 213 | 143 | 203 | 471 | 300 | 214 | 324 | 542 | 322 | 277 |
| 14 | 472 | 425 | 149 | 148 | 170 | 272 | 300 | 238 | 344 | 536 | 321 | 274 |
| 15 | 454 | 446 | 137 | 165 | 182 | 240 | 302 | 216 | 350 | 612 | 330 | 250 |
| 16 | 466 | 463 | --- | 171 | 191 | 255 | 287 | 278 | 345 | 732 | 340 | 256 |
| 17 | 493 | 472 | 144 | 164 | 214 | 280 | 282 | 324 | 352 | 667 | 343 | 272 |
| 18 | 534 | 462 | 136 | 149 | 230 | 424 | 281 | 363 | 375 | 664 | 335 | 306 |
| 19 | 550 | 496 | 152 | 158 | 219 | 370 | 279 | 323 | 383 | 711 | 309 | 322 |
| 20 | 551 | 518 | 152 | 167 | 217 | 266 | 302 | 328 | 388 | 946 | 326 | 219 |
| 21 | 674 | 528 | 149 | 188 | 214 | 272 | 314 | 291 | 399 | 1180 | 321 | 206 |
| 22 | 850 | 550 | 148 | 186 | 217 | 255 | 424 | 285 | 378 | 1190 | 238 | 228 |
| 23 | 881 | 516 | 174 | 184 | 232 | 268 | 303 | 313 | 370 | 1090 | 297 | 139 |
| 24 | 759 | 399 | 168 | 185 | 252 | 292 | 283 | 360 | 367 | 938 | 312 | 173 |
| 25 | 563 | 430 | 180 | 203 | 238 | 290 | 258 | 382 | 352 | 796 | 223 | 158 |
| 26 | 556 | 468 | 175 | 246 | 248 | 295 | 255 | --- | 412 | 674 | 279 | 191 |
| 27 | 539 | 567 | 171 | 230 | 316 | 281 | 249 | 359 | 388 | 610 | 200 | 172 |
| 28 | 581 | 518 | 165 | 206 | 344 | 296 | 263 | 359 | 328 | 565 | 193 | 188 |
| 29 | 590 | 368 | 167 | 229 | 270 | 300 | 279 | 355 | 386 | 510 | 200 | 218 |
| 30 | 594 | 546 | 174 | 236 | --- | 358 | 321 | 366 | 391 | 503 | 195 | 257 |
| 31 | 599 | --- | 177 | 404 | --- | 374 | --- | 433 | --- | 665 | 196 | --- |
| MONTH | 560 | 516 | 312 | 185 | 218 | 292 | 291 | 333 | 376 | 637 | 314 | 242 |

### TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 26.0 | 25.0 | 13.0 | 13.0 | 6.5 | 12.0 | 15.5 | 21.5 | 30.0 | 29.5 | 29.0 | 30.0 |
| 2 | 24.0 | 22.0 | 13.0 | 11.0 | 7.0 | 13.0 | --- | 21.5 | 26.5 | 30.0 | 29.0 | 30.0 |
| 3 | 24.0 | 21.0 | 13.0 | 11.5 | 6.5 | 13.0 | 16.0 | 21.5 | 26.5 | 29.5 | 29.0 | 30.0 |
| 4 | 25.5 | 24.0 | --- | 10.0 | 6.5 | 12.0 | 14.5 | 21.5 | 26.5 | 25.5 | 30.5 | 30.0 |
| 5 | 26.0 | 19.5 | --- | 9.0 | 6.0 | 13.0 | --- | 21.5 | 28.0 | 28.5 | 30.0 | --- |
| 6 | 25.5 | 22.0 | 11.0 | 10.0 | 6.0 | 12.0 | 18.5 | 20.5 | 26.5 | 28.5 | 33.0 | 30.0 |
| 7 | 25.5 | 20.5 | --- | --- | 5.5 | 12.0 | 18.5 | 20.5 | 28.0 | 28.5 | 33.0 | 30.0 |
| 8 | 25.5 | 20.0 | 10.0 | 11.5 | 5.5 | 12.0 | 14.5 | 20.0 | 28.0 | 28.5 | 29.0 | 30.0 |
| 9 | 25.0 | 20.0 | 11.0 | --- | 6.0 | 11.0 | 14.5 | 22.0 | 30.0 | 28.5 | 29.0 | 30.0 |
| 10 | 24.5 | 20.0 | 10.0 | --- | 6.0 | --- | 14.5 | 21.0 | 26.5 | 29.0 | 29.0 | 30.0 |
| 11 | 24.5 | 20.0 | 10.0 | --- | 5.5 | --- | 19.0 | 19.0 | 28.0 | 28.5 | 29.0 | 30.0 |
| 12 | 23.5 | 20.0 | 10.0 | 10.0 | 8.0 | 12.0 | 19.0 | 20.5 | 29.0 | 28.5 | 29.0 | 30.0 |
| 13 | 23.5 | 20.0 | 11.0 | 10.0 | 6.5 | 14.5 | 19.0 | 22.0 | 29.0 | 29.0 | 29.0 | 30.0 |
| 14 | 26.0 | 20.0 | 10.0 | 11.0 | 6.0 | 14.5 | 20.0 | --- | 28.0 | 29.0 | 31.5 | 30.0 |
| 15 | 26.0 | 20.0 | 11.0 | 9.0 | 6.5 | 15.0 | 20.0 | 22.0 | 26.5 | 29.5 | 31.5 | 30.0 |
| 16 | 26.0 | 16.5 | --- | --- | 8.5 | 14.5 | 20.0 | 20.5 | 26.5 | 29.5 | 29.0 | 30.0 |
| 17 | 26.0 | 15.5 | --- | 9.0 | 6.5 | 15.0 | 24.0 | 22.0 | 28.5 | 28.5 | 29.0 | 30.0 |
| 18 | 26.0 | --- | 13.0 | 4.5 | 6.0 | 14.5 | 20.0 | 23.0 | 28.0 | 28.5 | 29.0 | 30.0 |
| 19 | 24.0 | 14.5 | 13.0 | 4.5 | 6.5 | 16.0 | 21.5 | 26.0 | 29.5 | 29.5 | 30.0 | 30.0 |
| 20 | 24.0 | 15.5 | 11.5 | 6.5 | 9.5 | 15.5 | 23.0 | 22.0 | 28.0 | 29.5 | 29.0 | 30.0 |
| 21 | 25.5 | 14.5 | 11.5 | 7.0 | 9.5 | 15.5 | 22.0 | 22.0 | 28.0 | 30.0 | 26.5 | 30.0 |
| 22 | 25.5 | --- | 11.0 | 7.0 | 6.5 | 16.5 | 21.5 | 24.5 | 26.5 | 29.5 | 31.0 | 30.0 |
| 23 | 26.0 | 15.5 | 11.0 | 7.0 | 10.0 | 15.5 | 23.0 | 24.5 | 29.5 | 29.5 | 30.0 | 30.5 |
| 24 | 26.0 | 15.5 | 11.0 | 7.5 | 4.5 | 15.5 | 21.5 | 25.0 | 29.5 | 29.5 | 30.0 | 29.5 |
| 25 | 26.0 | 14.5 | 11.0 | 5.5 | 11.0 | 15.5 | 21.0 | 26.0 | 29.5 | 29.5 | 30.0 | 30.0 |
| 26 | 21.5 | 13.0 | 11.0 | 5.5 | 11.0 | 18.0 | 21.5 | --- | 29.5 | 29.5 | 29.0 | 29.5 |
| 27 | 21.5 | 14.5 | 11.0 | 6.5 | 11.0 | 17.0 | 21.5 | 26.5 | 29.5 | 29.5 | 30.0 | 28.0 |
| 28 | 21.5 | 14.5 | 11.0 | 6.5 | 11.5 | 16.0 | 21.5 | 26.5 | 29.5 | 29.0 | 30.0 | 29.0 |
| 29 | 21.5 | 14.5 | 11.0 | 3.5 | 13.0 | 15.5 | 22.0 | 28.0 | 29.5 | 29.0 | 30.0 | 29.0 |
| 30 | 21.5 | 14.5 | 7.5 | 3.5 | --- | 15.5 | 25.5 | 26.5 | 15.5 | 29.5 | 30.0 | 26.5 |
| 31 | 21.5 | --- | 11.0 | 3.5 | --- | 16.5 | --- | 26.5 | --- | 29.5 | 30.0 | --- |
| MONTH | 24.5 | 18.0 | 11.0 | 8.0 | 7.5 | 14.5 | 20.0 | 23.0 | 28.0 | 29.0 | 30.0 | 29.5 |

## 07364101 COFFEE CREEK NEAR CROSSETT, ARK.

LOCATION.--Lat 33°06'29", long 92°01'54", in sec.33, T.18 S., R.9 W., Ashley County, below mill pond, at bridge on county road, 2.5 miles southwest of Crossett.

PERIOD OF RECORD.--Chemical analyses: January to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, JANUARY TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| JAN. 25 | | 700 | 700.0 | 74.4 | 6.3 | 195 | 78 | 270 | 1.100 | 0.200 |
| FEB. 22 | | | | | | 181 | | 314 | | |
| MAR. 14 | | | | | | 178 | | 247 | | |
| APR. 25 | | | | 68.0 | 5.3 | 201 | 16 | 246 | 1.900 | 0.180 |
| MAY 23 | | | | | | 210 | | 300 | | |
| JUNE 20 | | | | | | 179 | | 350 | | |
| JULY 25 | | 450 | 960.0 | 57.6 | 15.1 | 224 | 78 | 327 | 1.600 | 0.050 |
| AUG. 22 | | | | | | 218 | | 350 | | |
| SEP. 19 | | | | | | 231 | | | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| JAN. 25 | 1051 | 95 | 1146 | 212 | 186.0 | 1104 | 6.90 | 1.0 | 800 | 150.0 |
| FEB. 22 | | | | | | 1308 | 7.40 | 14.0 | | |
| MAR. 14 | | | | | | 1315 | 7.60 | 17.0 | | 140.0 |
| APR. 25 | 847 | 118 | 965 | 192 | 170.0 | 1000 | 7.40 | 21.0 | 360 | 160.0 |
| MAY 23 | | | | | | 1299 | 7.40 | 29.0 | | 132.0 |
| JUNE 20 | | | | | | 1176 | 7.30 | 30.0 | | 140.0 |
| JULY 25 | 1068 | 160 | 1128 | 244 | 182.0 | 1400 | 7.40 | 28.0 | 800 | 170.0 |
| AUG. 22 | | | | | | 1530 | 7.50 | 32.0 | | 110.0 |
| SEP. 19 | | | | | | | 7.60 | | | 130.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| JAN. 25 | 0.0 | | 160.0 | 2250000 | 333000 | 50 |
| FEB. 22 | 0.0 | | 232.0 | | | |
| MAR. 14 | 0.0 | | 139.0 | | | |
| APR. 25 | 0.0 | | 70.0 | | | 1600 |
| MAY 23 | 0.0 | | 80.0 | | | |
| JUNE 20 | 0.0 | | 45.0 | | | |
| JULY 25 | 0.0 | 0.0 | 240.0 | | 24 | 106 |
| AUG. 22 | 0.0 | | 24.4 | | | |
| SEP. 19 | | | 35.7 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JULY 25 | | 11 | 100 | | 10K | 220 | 0.2 | 90 | 72 |

K Less than.

## 07364150 BAYOU BARTHOLOMEW NEAR MCGEHEE, ARK.

LOCATION.--Lat 33°37'40", long 91°26'45", in NE¼SW¼ sec.30, T.12 S., R.3 W., Desha County, at gaging station near center of stream on downstream side of bridge on State Highway 4, 2.7 miles west of McGehee, 17.5 miles downstream from Ables Creek, and at mile 200.5.

DRAINAGE AREA.--592 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1959 to September 1972.
Water temperature: October 1959 to September 1963.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | INSTANTANEOUS DISCHARGE (CFS) | DISSOLVED IRON (FE) (UG/L) | DISSOLVED MANGANESE (MN) (UG/L) | DISSOLVED CALCIUM (CA) (MG/L) | DISSOLVED MAGNESIUM (MG) (MG/L) | DISSOLVED SODIUM (NA) (MG/L) | DISSOLVED POTASSIUM (K) (MG/L) | BICARBONATE (HCO3) (MG/L) | CARBONATE (CO3) (MG/L) | ALKALINITY AS CACO3 (MG/L) | DISSOLVED NITRATE (N) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 05... | 28 | 90 | 470 | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV. 09... | 17 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC. 15... | 179 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN. 18... | 706 | 210 | 20 | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB. 24... | 109 | 510 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR. 28... | 247 | 630 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY 02... | 165 | 700 | 300 | -- | -- | -- | -- | -- | -- | -- | -- |
| JUNE 06... | 19 | 430 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JULY 11... | 151 | 150 | 250 | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG. 15... | 69 | 0 | 390 | 23 | 7.9 | 16 | 4.1 | 112 | 0 | 92 | -- |
| SEP. 27... | 30 | 200 | -- | -- | -- | -- | -- | -- | -- | -- | .29 |

| DATE | DISSOLVED AMMONIA NITROGEN (N) (MG/L) | ORGANIC NITROGEN (N) (MG/L) | TOTAL PHOSPHORUS (P) (MG/L) | HARDNESS (CA,MG) (MG/L) | NONCARBONATE HARDNESS (MG/L) | PERCENT SODIUM | SODIUM ADSORPTION RATIO | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | COLOR (PLATINUM-COBALT UNITS) | TURBIDITY (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 05... | .02 | .28 | .08 | -- | -- | -- | -- | 274 | 8.0 | 15 | 65 |
| NOV. 09... | .00 | .15 | .12 | -- | -- | -- | -- | 279 | 7.0 | 8 | 25 |
| DEC. 15... | .04 | .31 | .19 | -- | -- | -- | -- | 170 | 7.3 | 60 | 30 |
| JAN. 18... | .02 | .50 | .19 | -- | -- | -- | -- | 101 | 7.1 | 100 | 50 |
| FEB. 24... | .00 | .35 | .15 | -- | -- | -- | -- | 119 | 7.2 | 100 | 100 |
| MAR. 28... | .05 | .62 | .29 | -- | -- | -- | -- | 106 | 6.8 | 120 | 65 |
| MAY 02... | .06 | .36 | .05 | -- | -- | -- | -- | 133 | 7.1 | 120 | 65 |
| JUNE 06... | .14 | .42 | .12 | -- | -- | -- | -- | 224 | 7.2 | 60 | 65 |
| JULY 11... | .08 | .57 | .26 | -- | -- | -- | -- | 231 | 7.3 | 100 | 65 |
| AUG. 15... | .00 | .20 | .12 | 90 | 0 | 27 | .7 | 258 | 7.4 | 60 | 60 |
| SEP. 27... | .02 | .59 | .07 | -- | -- | -- | -- | 291 | 7.6 | 5 | 25 |

| DATE | CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) | ALDRIN (UG/L) | ALDRIN IN BOTTOM DEPOSITS (UG/KG) | CHLORDANE (UG/L) | CHLORDANE IN BOTTOM DEPOSITS (UG/KG) | DDD (UG/L) | DDD IN BOTTOM DEPOSITS (UG/KG) | DDE (UG/L) | DDE IN BOTTOM DEPOSITS (UG/KG) | DDT (UG/L) | DDT IN BOTTOM DEPOSITS (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 05... | 18 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV. 09... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC. 15... | 20 | .00 | <.2 | .0 | <1 | .00 | 190 | .01 | 100 | .03 | 9.9 |
| JAN. 18... | 26 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB. 24... | 22 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR. 28... | 29 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY 02... | 29 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUNE 06... | 25 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JULY 11... | -- | .00 | <.2 | .0 | <1 | .02 | 260 | .01 | 170 | .02 | 36 |
| AUG. 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP. 27... | 9 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

< LESS THAN.

## 07364150 BAYOU BARTHOLOMEW NEAR MCGEHEE, ARK.--continued

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DI-ELDRIN (UG/L) | DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG) | ENDRIN (UG/L) | ENDRIN IN BOTTOM DE-POSITS (UG/KG) | HEPTA-CHLOR (UG/L) | HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG) | HEPTA-CHLOR EPOXIDE (UG/L) | HEPTA-CHLOR EPOXIDE IN BOT-TOM DE-POSITS (UG/KG) | LINDANE (UG/L) | LINDANE IN BOTTOM DE-POSITS (UG/KG) | MALA-THION IN BOTTOM DE-POSITS (UG/KG) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 05... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC. 15... | .01 | <.2 | .00 | <.2 | .00 | <.2 | .00 | <.2 | .00 | <.2 | <.2 |
| JAN. 18... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JULY 11... | .01 | <.2 | .00 | <.2 | .00 | <.2 | .00 | <.2 | .00 | <.2 | -- |

| DATE | METHYL PARA-THION IN BOT-TOM DE-POSITS (UG/KG) | PARA-THION IN BOTTOM DE-POSITS (UG/KG) | TOX-APHENE IN BOTTOM DE-POSITS (UG/KG) | 2,4-D (UG/L) | 2,4-D IN BOTTOM DE-POSITS (UG/KG) | 2,4,5-T (UG/L) | 2,4,5-T IN BOTTOM DE-POSITS (UG/KG) | SILVEX (UG/L) | SILVEX IN BOTTOM DE-POSITS (UG/KG) | DIS-SOLVED ARSENIC (AS) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 05... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 10 |
| DEC. 15... | <.2 | <.2 | <10 | .03 | <.7 | .02 | <.2 | .00 | <.2 | -- |
| JAN. 18... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 10 |
| MAY 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- | <10 |
| JULY 11... | -- | -- | -- | .00 | <3.0 | .00 | <.8 | .00 | <.9 | 10 |

| DATE | DIS-SOLVED CAD-MIUM (CD) (UG/L) | HEXA-VALENT CHRO-MIUM (CR6) (UG/L) | DIS-SOLVED COBALT (CO) (UG/L) | DIS-SOLVED COPPER (CU) (UG/L) | DIS-SOLVED LEAD (PB) (UG/L) | DIS-SOLVED LITHIUM (LI) (UG/L) | DIS-SOLVED MERCURY (HG) (UG/L) | DIS-SOLVED NICKEL (NI) (UG/L) | DIS-SOLVED SILVER (AG) (UG/L) | DIS-SOLVED ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 05... | 1 | <10 | 0 | 4 | 4 | 10 | 1.6 | 2 | 0 | 20 |
| DEC. 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN. 18... | 0 | <10 | 0 | 5 | 21 | -- | .9 | 4 | 0 | 10 |
| MAY 02... | 0 | <10 | 0 | 5 | 2 | -- | <.5 | 1 | -- | 10 |
| JULY 11... | 1 | <10 | 0 | 4 | 1 | -- | <.5 | 2 | -- | 270 |

### FIELD ANALYSES

| DATE | INSTAN-TANEOUS DIS-CHARGE (CFS) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | DIS-SOLVED OXYGEN (MG/L) | PER-CENT SATUR-ATION |
|---|---|---|---|---|---|---|---|---|---|
| OCT. 05... | 28 | 132 | 0 | 108 | 272 | 7.5 | 23.0 | 4.0 | 46 |
| NOV. 09... | 17 | -- | -- | -- | -- | -- | 11.5 | 6.5 | 60 |
| DEC. 15... | 179 | -- | -- | -- | 185 | 7.3 | 12.0 | -- | -- |
| JAN. 18... | 786 | -- | -- | -- | -- | 7.2 | 5.5 | -- | -- |
| FEB. 24... | 109 | -- | -- | -- | 140 | -- | 11.5 | 8.2 | 75 |
| MAR. 28... | 247 | -- | -- | -- | 117 | 7.0 | 15.5 | 7.1 | 71 |
| MAY 02... | 165 | 50 | 0 | 41 | 144 | 7.1 | 19.0 | 5.5 | 58 |
| JUNE 06... | 19 | -- | -- | -- | 295 | 7.4 | 27.0 | 4.2 | 52 |
| JULY 11... | 151 | -- | -- | -- | 251 | 6.9 | 24.5 | 4.5 | 54 |
| AUG. 15... | 69 | -- | -- | -- | 268 | 7.7 | 28.5 | 5.1 | 65 |
| SEP. 27... | 30 | -- | -- | -- | 290 | 7.6 | 25.0 | 4.6 | 55 |

< LESS THAN.

## 07364200 BAYOU BARTHOLOMEW NEAR JONES, LA.

LOCATION.--Lat 32°59'25", long 91°39'20", in SE¼SW¼ sec.9, T.23 N., R.8 E., Morehouse Parish, on downstream side of right pier of bridge on Louisiana State Highway 834, 1.0 mile downstream from Arkansas-Louisiana State line, and 1.6 miles northwest of Jones.

DRAINAGE AREA.--1,187 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1958, October 1967 to September 1972. Water temperature: October 1958 to September 1968.

REMARKS.--Additional analyses furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DIS-CHARGE (CFS) | DIS-SOLVED SILICA (SIO2) (MG/L) | DIS-SOLVED CAL-CIUM (CA) (MG/L) | DIS-SOLVED MAG-NE-SIUM (MG) (MG/L) | DIS-SOLVED SODIUM (NA) (MG/L) | DIS-SOLVED PO-TAS-SIUM (K) (MG/L) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | DIS-SOLVED SULFATE (SO4) (MG/L) | DIS-SOLVED CHLO-RIDE (CL) (MG/L) | DIS-SOLVED FLUO-RIDE (F) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | | |
| 20... | 126 | 15 | 30 | 6.6 | 20 | 3.0 | 149 | 0 | 122 | 4.2 | 17 | .3 |
| NOV. | | | | | | | | | | | | |
| 17... | 70 | 16 | 32 | 7.6 | 22 | 3.1 | 164 | 0 | 135 | 3.8 | 19 | .3 |
| DEC. | | | | | | | | | | | | |
| 02... | 88 | 16 | 30 | 7.8 | 20 | 3.0 | 154 | 0 | 126 | 3.2 | 18 | .3 |
| JAN. | | | | | | | | | | | | |
| 07... | 1960 | 5.0 | 4.5 | 1.6 | 6.5 | 2.9 | 20 | 0 | 16 | 8.2 | 6.0 | .1 |
| 19... | 2730 | 6.2 | 3.8 | 1.3 | 4.0 | 3.1 | 18 | 0 | 15 | 6.8 | 6.5 | .1 |
| FEB. | | | | | | | | | | | | |
| 17... | 741 | 5.9 | 5.3 | 2.1 | 5.7 | 3.5 | 23 | 0 | 19 | 10 | 5.9 | .2 |
| APR. | | | | | | | | | | | | |
| 06... | 1350 | 5.7 | 5.2 | 1.2 | 5.2 | 3.2 | 20 | 0 | 16 | 7.6 | 4.1 | .1 |
| MAY | | | | | | | | | | | | |
| 10... | 426 | 8.7 | 10 | 2.9 | 8.0 | 3.1 | 48 | 0 | 39 | 5.6 | 7.6 | .2 |
| JUNE | | | | | | | | | | | | |
| 14... | 95 | 16 | 26 | 8.0 | 22 | 3.7 | 120 | 0 | 98 | 10 | 26 | .2 |
| JULY | | | | | | | | | | | | |
| 26... | 109 | 16 | 20 | 6.8 | 16 | 2.8 | 97 | 0 | 80 | 8.6 | 20 | .2 |
| SEP. | | | | | | | | | | | | |
| 11... | 100 | 13 | 26 | 8.3 | 19 | 2.8 | 127 | 0 | 104 | 4.2 | 22 | .2 |

| DATE | DIS-SOLVED NITRATE (N) (MG/L) | DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L) | DIS-SOLVED SOLIDS (TONS PER AC-FT) | DIS-SOLVED SOLIDS (TONS PER DAY) | HARD-NESS (CA,MG) (MG/L) | NON-CAR-BONATE HARD-NESS (MG/L) | PERCENT SODIUM | SODIUM AD-SORP-TION RATIO | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | COLOR (PLAT-INUM-COBALT UNITS) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | | |
| 20... | .02 | 150 | .21 | 51.0 | 100 | 0 | 29 | .9 | 280 | 7.4 | 25.0 | 5 |
| NOV. | | | | | | | | | | | | |
| 17... | .04 | 169 | .23 | 31.9 | 110 | 0 | 29 | .9 | 305 | 7.2 | 20.5 | 5 |
| DEC. | | | | | | | | | | | | |
| 02... | .02 | 169 | .23 | 40.2 | 110 | 0 | 28 | .8 | 292 | 7.0 | 6.0 | 5 |
| JAN. | | | | | | | | | | | | |
| 07... | .07 | 80 | .11 | 423 | 18 | 2 | 40 | .7 | 72 | 6.3 | 11.0 | 60 |
| 19... | .10 | 68 | .09 | 501 | 15 | 0 | 32 | .5 | 63 | 6.6 | 12.0 | 50 |
| FEB. | | | | | | | | | | | | |
| 17... | .09 | 90 | .12 | 180 | 22 | 3 | 32 | .5 | 79 | 6.7 | 10.0 | 60 |
| APR. | | | | | | | | | | | | |
| 06... | .20 | 75 | .10 | 273 | 18 | 2 | 34 | .5 | 48 | 6.8 | 16.0 | 60 |
| MAY | | | | | | | | | | | | |
| 10... | .29 | 88 | .12 | 101 | 37 | 0 | 30 | .6 | 120 | 6.9 | 20.6 | 20 |
| JUNE | | | | | | | | | | | | |
| 14... | .52 | 176 | .24 | 45.1 | 98 | 0 | 32 | 1.0 | 302 | 7.2 | 28.0 | 0 |
| JULY | | | | | | | | | | | | |
| 26... | .07 | 155 | .21 | 45.6 | 78 | 0 | 30 | .8 | 266 | 6.8 | 31.0 | 10 |
| SEP. | | | | | | | | | | | | |
| 11... | .09 | 163 | .22 | 44.0 | 99 | 0 | 29 | .8 | 269 | 7.1 | 30.0 | 10 |

## 07364200 BAYOU BARTHOLOMEW NEAR JONES, LA.--continued

### ADDITIONAL CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | 112 | | | | | 123 | | 18 | | |
| NOV. 23 | 88 | | | | | 122 | | 21 | | |
| DEC. 14 | 311 | 1300 | 0.0 | 14.4 | 4.9 | 56 | 1K | 10 | 0.600 | 1.200 |
| JAN. 24 | | | | | | | | 5 | | |
| JAN. 25 | 1990 | | | | | 16 | | 19 | | |
| FEB. 22 | 503 | | | | | 22 | | 6 | | |
| MAR. 14 | 944 | | | 5.6 | 2.4 | 19 | 1 | 9 | 0.400 | 0.120 |
| APR. 25 | 450 | | | | | 33 | | 14 | | |
| MAY 23 | 212 | | | | | 50 | | 10 | | |
| JUNE 20 | 104 | | | | | 89 | | 17 | | |
| JULY 25 | 114 | | | | | 76 | | 27 | | |
| AUG. 22 | 94 | | | | | 119 | | 19 | | |
| SEP. 19 | 117 | 210 | 960.0 | 20.0 | | 98 | 10 | 24 | 0.570 | 0.050 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | | | | | | 263 | 7.70 | 20.0 | | 30.0 |
| NOV. 23 | | | | | | 204 | 7.60 | 9.0 | | 25.0K |
| DEC. 14 | 121 | 26 | 147 | 56 | 36.0 | 125 | 7.40 | 14.0 | 40 | 25.0 |
| JAN. 25 | | | | | | 80 | 6.80 | 8.0 | | 25.0 |
| FEB. 22 | | | | | | 71 | 7.00 | 10.0 | | 25.0K |
| MAR. 14 | 128 | 4 | 132 | 24 | 14.0 | 66 | 7.30 | 14.0 | 90 | 40.0 |
| APR. 25 | | | | | | 143 | 6.80 | 20.0 | | 120.0 |
| MAY 23 | | | | | | 122 | 6.80 | 28.0 | | 93.0 |
| JUNE 20 | | | | | | 217 | 7.40 | 30.0 | | 35.0 |
| JULY 25 | | | | | | 230 | 7.60 | 32.0 | | 60.0 |
| AUG. 22 | | | | | | 301 | 7.70 | 29.0 | | 26.0 |
| SEP. 19 | 188 | 76 | 264 | 98 | 70.0 | 280 | 7.60 | 28.0 | 50 | 110.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDC /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 26 | 7.4 | | 1.2 | | | |
| NOV. 23 | 8.0 | | | | | |
| DEC. 14 | 7.6 | | 1.2 | 180 | 1800 | 360 |
| JAN. 25 | 8.3 | | 1.1 | | | |
| FEB. 22 | 9.7 | | 1.3 | | | |
| MAR. 14 | 7.1 | | 1.0 | | | |
| APR. 25 | 4.7 | | 1.1 | | | |
| MAY 23 | 4.7 | | 1.6 | | | |
| JUNE 20 | 5.5 | | 1.0 | | | |
| JULY 25 | 5.1 | 69.0 | 0.8 | | | |
| AUG. 22 | 5.4 | 69.0 | 1.0 | | | |
| SEP. 19 | 4.7 | 59.0 | 1.2 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| SEP. 19 | | 8 | 50K | | 79 | 100K | | | 93 |

K Less than.

## 07364203 OVERFLOW CREEK NEAR BONITA, LA.

LOCATION.--Lat 32°59'02", long 91°42'06", in SW¼NE¼ sec.13, T.23 N., R.7 E., Morehouse Parish, at bridge on Louisiana State Highway 834, 4.3 miles northwest of Bonita.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHCS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | | 400 | 700.0 | 13.2 | 9.2 | 125 | 2 | 16 | 0.010K | 1.850 |
| NOV. 23 | | | | | | 90 | | 12 | | |
| DEC. 14 | | | | | | 11 | | 8 | | |
| JAN. 25 | | 600 | 100.0K | 4.0 | 1.5 | 16 | 6 | 2 | 0.200 | 0.050K |
| FEB. 22 | | | | | | 16 | | 5 | | |
| MAR. 14 | | | | | | 17 | | 6 | | |
| APR. 25 | | | | 5.6 | 2.8 | 20 | 1K | 8 | 0.400 | 0.120 |
| MAY 23 | | | | | | 24 | | 3 | | |
| JULY 25 | | 1675 | 840.0 | 26.4 | 5.8 | 62 | 13 | 9 | 0.400 | 0.150 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | 177 | 35 | 212 | 116 | 70.0 | 32 | 7.50 | 21.0 | 5 | 25.0 |
| NOV. 23 | | | | | | 149 | 7.30 | 8.0 | | 210.0 |
| DEC. 14 | | | | | | 66 | 6.40 | 13.0 | | 25.0K |
| JAN. 25 | 71 | 21 | 92 | 16 | 10.0 | 35 | 6.90 | 13.0 | 100 | 25.0K |
| FEB. 22 | | | | | | 47 | 6.60 | 10.0 | | 25.0K |
| MAR. 14 | | | | | | 56 | 7.00 | 16.0 | | 25.0K |
| APR. 25 | 127 | 56 | 183 | 26 | 14.0 | 49 | 6.70 | 18.0 | 100 | 70.0 |
| MAY 23 | | | | | | 59 | 6.60 | 28.0 | | 25.0K |
| JULY 25 | 132 | 39 | 171 | 66 | 42.0 | 131 | 7.20 | 29.0 | 120 | 60.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 26 | 4.9 | | 1.3 | 680 | 18000 | 400 |
| NOV. 23 | 7.2 | | | | | |
| DEC. 14 | 7.2 | | 2.6 | | | |
| JAN. 25 | 4.7 | | 1.1 | 384 | 560 | 320 |
| FEB. 22 | 7.7 | | 1.6 | | | |
| MAR. 14 | 5.3 | | 1.1 | | | |
| APR. 25 | 5.4 | | | | 6300 | 256 |
| MAY 23 | 4.8 | | 5.2 | | | |
| JULY 25 | 3.7 | 47.0 | 2.4 | 226 | 7000 | 360 |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JULY 25 | | 8 | 10CK | | 33 | 260 | 1.9 | 70 | 87 |

K Less than.

## 07364300 CHEMIN-A-HAUT BAYOU NEAR BEEKMAN, LA.

LOCATION.--Lat 32°58'55", long 91°48'20", in SE¼ sec.13, T.23 N., R.6 E., Morehouse Parish, near center of span on downstream side of bridge on Parish road, 1.9 miles downstream from Arkansas-Louisiana State line, and 6 miles northeast of Beekman.

DRAINAGE AREA.--271 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | 0.5 | 400 | 2160.0 | 22.4 | 10.7 | 166 | 1 | 21 | 0.010K | 1.170 |
| NOV. 23 | 51 | | | | | 56 | | 15 | | |
| DEC. 14 | 131 | | | | | 20 | | 9 | | |
| JAN. 25 | 26 | | | | | 37 | 2 | 8 | 0.100K | 0.300 |
| FEB. 22 | 24 | | | | | 29 | | 6 | | |
| MAR. 14 | 505 | | | | | 16 | | 12 | | |
| APR. 25 | 475 | | | 4.0 | 2.4 | 13 | 1K | 10 | 0.400 | 0.120 |
| MAY 23 | 9 | | | | | 31 | | 7 | | |
| JUNE 20 | 84 | | | | | 37 | | 10 | | |
| JULY 25 | 9 | 1225 | 2080.0 | 22.4 | 4.4 | 63 | 16 | 10 | 0.100K | 0.130 |
| AUG. 22 | 11 | 740 | 580.0 | | | 99 | | 18 | | |
| SEP. 19 | 13 | | | | | 151 | | 29 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | 51 | 21 | 72 | 100 | 56.0 | 222 | 7.30 | 20.0 | 20 | 30.0 |
| NOV. 23 | | | | | | 163 | 7.20 | 8.0 | | 25.0K |
| DEC. 14 | | | | | | 80 | 6.80 | 1.3 | | 25.0K |
| JAN. 25 | 111 | 15 | 126 | 30 | 24.0 | 55 | 6.40 | 12.0 | 60 | 25.0K |
| FEB. 22 | | | | | | 86 | 7.00 | 10.0 | | 25.0K |
| MAR. 14 | | | | | | 58 | 7.10 | 15.0 | | 25.0K |
| APR. 25 | 119 | 35 | 154 | 20 | 10.0 | 43 | 6.50 | 17.0 | 80 | 65.0 |
| MAY 23 | | | | | | 86 | 6.60 | 25.0 | | 25.0K |
| JUNE 20 | | | | | | 127 | 7.60 | 25.0 | | 30.0 |
| JULY 25 | 118 | 11 | 129 | 56 | 38.0 | 141 | 7.20 | 31.0 | 80 | 25.0K |
| AUG. 22 | | | | | | 262 | 7.60 | 27.0 | | 12.0 |
| SEP. 19 | | | | | | 377 | 7.70 | 25.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 26 | 2.2 | | 1.8 | 64 | 2900 | 420 |
| NOV. 23 | 7.1 | | | | | |
| DEC. 14 | 7.7 | | 1.8 | | | |
| JAN. 25 | 5.4 | | 1.2 | 550 | 640 | 213 |
| FEB. 22 | 8.7 | | 1.3 | | | |
| MAR. 14 | 6.1 | | 1.0 | | | |
| APR. 25 | 6.0 | | 2.3 | | 18000 | 152 |
| MAY 23 | 3.1 | | 1.4 | | | |
| JUNE 20 | 5.7 | | 1.8 | | | |
| JULY 25 | 3.0 | 40.0 | 3.0 | 444 | 6000 | 116 |
| AUG. 22 | 5.0 | 62.0 | 1.9 | | | |
| SEP. 19 | 2.4 | 29.0 | 0.9 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JULY 25 | | 12 | 100 | | 50 | 220 | 0.8 | 80 | 74 |
| AUG. 22 | | | | | 10K | | | 50K | 16 |
| SEP. 19 | | | | | | | | | |

K Less than.

### 07364600 BAYOU DE LOUTRE NEAR EL DORADO, ARK.

LOCATION.--Lat 33°05'55", long 92°35'32", in SE¼NW¼ sec.6, T.19 S., R.14 W., Union County, at bridge on county road 0.8 mile downstream from Highbank Creek, and 8.5 miles southeast of El Dorado.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | 16 | | | | | 125 | | 880 | | |
| NOV. 23 | 41 | | | | | 29 | 68 | 1225 | 0.800 | 0.700 |
| DEC. 14 | 58 | | | | | 32 | | 790 | | |
| JAN. 25 | 25 | | | | | 64 | | 1190 | | |
| FEB. 22 | 35 | 500 | 500.0 | 132.0 | 25.3 | 56 | 40 | 965 | 1.100 | 0.350 |
| MAR. 14 | 41 | | | | | 58 | | 880 | | |
| APR. 25 | 16 | | | | | 70 | | 1026 | | |
| MAY 23 | | | | 111.0 | 24.0 | 127 | 55 | 845 | 0.500 | 0.580 |
| JUNE 20 | | | | | | 59 | | 1420 | | |
| JULY 25 | | | | | | 141 | | 1863 | | |
| AUG. 22 | | 440 | 800.0 | 232.0 | | 133 | 75 | 2220 | 0.550 | 0.980 |
| SEP. 19 | 24 | | | | | 105 | | | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | | | | | | 5000 | 7.40 | 16.0 | | 25.0K |
| NOV. 23 | | | | 376 | 270.0 | 2857 | 6.90 | 7.0 | 20 | 25.0K |
| DEC. 14 | | | | | | 420 | 6.90 | 13.0 | | 25.0K |
| JAN. 25 | | | | | | 2857 | 7.00 | 11.0 | | 25.0K |
| FEB. 22 | 1849 | 194 | 2043 | 434 | 330.0 | 2631 | 7.20 | 11.0 | 30 | 25.0K |
| MAR. 14 | | | | | | 3448 | 7.30 | 18.0 | | 25.0K |
| APR. 25 | | | | | | 3550 | 7.00 | 25.0 | | 25.0K |
| MAY 23 | 1738 | 82 | 1820 | 376 | 278.0 | 2551 | 7.40 | 24.0 | 50 | 33.0 |
| JUNE 20 | | | | | | 3846 | 6.80 | 37.0 | | 25.0K |
| JULY 25 | | | | | | 5100 | 7.60 | 27.0 | | 25.0K |
| AUG. 22 | 4449 | 109 | 4558 | 750 | 580.0 | 7060 | 8.10 | 33.0 | 40 | 9.0 |
| SEP. 19 | | | | | | 5435 | 7.50 | 29.0 | | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 26 | 2.2 | | 17.2 | | | |
| NOV. 23 | 8.0 | | | 140 | 1100 | 270 |
| DEC. 14 | 5.7 | | 1.4 | | | |
| JAN. 25 | 4.6 | | 3.0 | | | |
| FEB. 22 | 11.5 | | 2.2 | 47 | 130 | 73 |
| MAR. 14 | 6.7 | | 2.6 | | | |
| APR. 25 | 7.5 | | 9.2 | | | |
| MAY 23 | 2.9 | | 12.4 | 2300 | 2700 | |
| JUNE 20 | 5.9 | | 3.4 | | | |
| JULY 25 | 7.0 | 24.0 | 1.0 | | | |
| AUG. 22 | 12.2 | 167.0 | 3.2 | | | |
| SEP. 19 | 6.0 | 77.0 | 4.1 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 22 | | 26 | 50K | | 35 | 100 | | 100 | 12 |
| SEP. 19 | | | | | | | | | |

K Less than.

## 07365800 CORNIE BAYOU NEAR THREE CREEKS, ARK.

LOCATION.--Lat 33°02'21", long 92°56'15", in SW¼NW¼ sec.36, T.19 S., R.18 W., Union County, at gaging station on left bank at downstream side of bridge on State Highway 15, 3.4 miles downstream from Pidgeon Roost Creek, and 6.0 miles southwest of town of Three Creeks.

DRAINAGE AREA.--180 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1952 to September 1955, October 1970 to September 1972. Specific conductance, chloride, and pH: May 1950 to September 1952, February 1956 to September 1962. Water temperatures: May 1950 to September 1955, February 1956 to July 1962.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | 3 | | | | | | | 200 | | |
| NOV. 23 | 15 | | | | | 12 | 1 | 40 | 0.200 | 0.250 |
| DEC. 14 | 35 | | | | | | | 385 | | |
| JAN. 25 | 41 | | | | | | | 320 | | |
| FEB. 22 | 31 | 200 | 2100.0 | 65.6 | 12.6 | 2 | 2 | 380 | 0.200 | 0.030K |
| MAR. 14 | 64 | | | | | | | 266 | | |
| APR. 25 | 8 | | | | | | | 292 | | |
| MAY 23 | 5 | | | 67.0 | 16.0 | 5 | 4 | 390 | 0.600 | 0.030K |
| JUNE 20 | 4 | | | | | | | 180 | | |
| JULY 25 | 1 | | | | | 5 | | 225 | | |
| AUG. 22 | 0.2 | 1260 | 2850.0 | 47.0 | | 6 | 6 | 295 | 0.240 | 0.370 |
| SEP. 19 | 0.1 | | | | | | | 240 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | | | | | | | | 15.0 | | |
| NOV. 23 | | | | 24 | 16.0 | 113 | 6.80 | 7.0 | 80 | 25.0K |
| DEC. 14 | | | | | | 1000 | | 10.0 | | |
| JAN. 25 | | | | | | 740 | | | | |
| FEB. 22 | 744 | 11 | 755 | 216 | 164.0 | 1052 | 5.20 | 10.0 | 5 | 25.0K |
| MAR. 14 | | | | | | | | 16.0 | | |
| APR. 25 | | | | | | | | 20.0 | | |
| MAY 23 | 775 | 112 | 887 | 232 | 168.0 | 1081 | 5.40 | 22.0 | 10 | 25.0K |
| JUNE 20 | | | | | | 535 | | 27.0 | | |
| JULY 25 | | | | | | 650 | 6.10 | 25.0 | | 25.0K |
| AUG. 22 | 617 | 52 | 669 | 200 | 118.0 | 1000 | 6.00 | 30.0 | 15 | 12.0 |
| SEP. 19 | | | | | | 719 | | 27.0 | | |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| NOV. 23 | 8.1 | | 2.1 | 130 | 880 | 190 |
| FEB. 22 | 10.3 | | 0.8 | 4K | 4K | 4K |
| MAY 23 | 4.9 | | 0.7 | 0 | 46 | |
| JULY 25 | 2.4 | 29.0 | 0.0 | | | |
| AUG. 22 | 4.5 | 59.0 | 2.7 | | | |
| SEP. 19 | | | | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 22 | | 9 | 50K | | 15 | 100K | | 60 | 10 |
| SEP. 19 | | | | | | | | | |

K Less than

## 07365860 LITTLE CORNIE CREEK NEAR GORDON, LA.

LOCATION.--Lat 33°00'42", long 92°58'24", in NW¼SE¼ sec.3, T.23 N., R.6 W., Claiborne Parish, at bridge on Louisiana State Highway 161, 0.4 mile south of Arkansas-Louisiana State line, and 3.9 miles northeast of Gordon.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | 1 | | | | | | | 200 | | |
| NOV. 23 | 4 | | | | | 4 | 2 | 81 | 0.100 | 0.250 |
| DEC. 14 | 72 | | | | | | | 85 | | |
| JAN. 25 | 8 | | | | | | | 57 | | |
| FEB. 22 | 3 | 1200 | 100.0 | 8.8 | 4.9 | 10 | 2 | 51 | 0.600 | 0.160 |
| MAR. 14 | 15 | | | | | | | 49 | | |
| APR. 25 | 2 | | | | | | | 24 | | |
| MAY 23 | 0 | | | 5.6 | 4.0 | 13 | 2 | 48 | 0.800 | 0.030 |
| JUNE 20 | 0 | | | | | | | 9 | | |
| JULY 25 | 0 | | | | | 29 | | 8 | | |
| AUG. 22 | 0 | | | | | | | | | |
| SEP. 19 | 12 | | | | | | | 9 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | | | | | | | | 15.0 | | |
| NOV. 23 | | | | 50 | 30.0 | 204 | 6.00 | 7.0 | 40 | 25.0K |
| DEC. 14 | | | | | | 222 | | 10.0 | | |
| JAN. 25 | | | | | | 178 | | 11.0 | | |
| FEB. 22 | 128 | 35 | 163 | 42 | 22.0 | 163 | 6.90 | 10.0 | 40 | 25.0K |
| MAR. 14 | | | | | | | | 18.0 | | |
| APR. 25 | | | | | | | | 19.0 | | |
| MAY 23 | 155 | 28 | 183 | 40 | 24.0 | 168 | 6.50 | 20.0 | 100 | 25.0K |
| JUNE 20 | | | | | | 89 | | 28.0 | | |
| JULY 25 | | | | | | 73 | 6.80 | 24.0 | | 25.0K |
| SEP. 19 | | | | | | 73 | | 25.0 | | |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| NOV. 23 | 8.8 | | 1.7 | 60 | 1400 | 180 |
| FEB. 22 | 10.5 | | 1.5 | 55 | 150 | 29 |
| MAY 23 | 7.5 | | 0.6 | 6500 | 5000 | |
| JULY 25 | 1.5 | 18.0 | 3.0 | | | |
| SEP. 19 | | | | | | |

K Less than.

## 07365900 THREE CREEKS NEAR THREE CREEKS, ARK.

LOCATION.--Lat 33°04'01", long 92°53'02", in NE¼NW¼ sec.20, T.19 S., R.17 W., Union County, at gaging station near right bank on downstream side of bridge on State Highway 15, 2.2 miles southwest of town of Three Creeks, and 1.8 miles upstream from Ash Branch.

DRAINAGE AREA.--50.3 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1952 to September 1955, October 1970 to September 1972. Specific conductance, chloride and pH: May 1950 to September 1952, February 1956 to September 1962. Water temperatures: May 1950 to September 1955, February 1956 to September 1962.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | 15 | | | | | | | 170 | | |
| NOV. 23 | 23 | | | | | 2 | 2 | 1000 | 0.100 | 0.010K |
| DEC. 14 | 38 | | | | | | | 645 | | |
| JAN. 25 | 24 | | | | | | | 500 | | |
| FEB. 22 | 23 | 3000 | 3500.0 | 96.8 | 17.5 | | 1 | 548 | 0.100 | 0.030K |
| MAR. 14 | 34 | | | | | | | 357 | | |
| APR. 25 | 5 | | | | | | | 420 | | |
| MAY 23 | 2 | | | 89.0 | 17.0 | 5 | 4 | 475 | 0.600 | 0.030 |
| JUNE 20 | 1 | | | | | | | 85 | | |
| JULY 25 | 0.5 | | | | | 4 | | 336 | | |
| AUG. 22 | 0.2 | 1960 | 3000.0 | 26.0 | | 25 | 4 | 145 | 0.330 | 0.080 |
| SEP. 19 | 1 | | | | | | | 40 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | | | | | | | | 15.0 | | |
| NOV. 23 | | | | 610 | 484.0 | 2857 | 5.50 | 7.0 | 5 | 25.0K |
| DEC. 14 | | | | | | 4000 | | 10.0 | | |
| JAN. 25 | | | | | | 1149 | | | | |
| FEB. 22 | 1055 | 38 | 1093 | 314 | 242.0 | 1428 | 5.20 | 9.0 | 0 | 25.0K |
| MAR. 14 | | | | | | | | 17.0 | | |
| APR. 25 | | | | | | | | 20.0 | | |
| MAY 23 | 935 | 29 | 964 | 274 | 202.0 | 1325 | 5.40 | 21.0 | 40 | 25.0K |
| JUNE 20 | | | | | | 313 | | 27.0 | | |
| JULY 25 | | | | | | 580 | 5.90 | 24.0 | | 25.0K |
| AUG. 22 | 321 | 50 | 371 | 96 | 66.0 | 545 | 6.70 | 29.0 | 70 | 30.0 |
| SEP. 19 | | | | | | 215 | | 27.0 | | |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| NOV. 23 | 7.2 | | | 100 | 1100 | 100 |
| FEB. 22 | 9.7 | | 0.8 | 4K | 4K | 4K |
| MAY 23 | 1.6 | | 5.2 | 9 | 46 | |
| JULY 25 | 2.6 | 31.0 | | | | |
| AUG. 22 | 2.3 | 29.0 | 1.9 | | | |
| SEP. 19 | | | | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 22 | | 10 | 50K | | 25 | 100 | | 50K | 11 |
| SEP. 19 | | | | | | | | | |

K Less than.

## 07366105 LITTLE CORNIE BAYOU EAST OF JUNCTION CITY, ARK.

LOCATION.--Lat 33°01'15", long 92°42'00", in SW¼SW¼ sec.31, T.19 S., R.15 W., Union County, at bridge on county road, 0.5 mile north of Arkansas-Louisiana State line, and 1.5 miles northeast of Junction City.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRCN FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHCS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | 5 | | | | | 45 | | 46 | | |
| NOV. 23 | 14 | | | | | 18 | 2 | 46 | 0.100 | C.600 |
| DEC. 14 | 34 | | | | | 1C | | 160 | | |
| JAN. 25 | 29 | | | | | 13 | | 94 | | |
| FEB. 22 | 31 | 800 | 100.CK | 15.2 | 6.3 | 13 | 2 | 82 | 0.500 | C.180 |
| MAR. 14 | 36 | | | | | 21 | | 78 | | |
| APR. 25 | 8 | | | | | 28 | | 56 | | |
| MAY 23 | 21 | | | 11.0 | 5.0 | 20 | 1K | 68 | 1.000 | C.060 |
| JUNE 20 | 16 | | | | | 30 | | | | |
| JULY 25 | 1 | | | | | 44 | | 75 | | |
| AUG. 22 | 1 | 1260 | 570.C | 8.0 | | 24 | 6 | 34 | 0.350 | C.380 |
| SEP. 19 | 6 | | | | | 37 | | 38 | | |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESICUE TCTAL MG/L | TOT HARD CACC3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICRCMHC | PH SU | WATER TEMP CENT | COLOR PT-CC UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | | | | | | 192 | 7.10 | 15.0 | | 25.0K |
| NOV. 23 | | | | 40 | 26.0 | 200 | 7.10 | 7.0 | 60 | 25.0K |
| DEC. 14 | | | | | | 434 | 6.50 | 11.0 | | 25.0K |
| JAN. 25 | | | | | | 227 | 6.6C | 12.0 | | 25.0K |
| FEB. 22 | 214 | 28 | 242 | 64 | 38.0 | 270 | 7.10 | 9.0 | 30 | 25.0K |
| MAR. 14 | | | | | | 253 | 6.9C | 17.0 | | 25.0K |
| APR. 25 | | | | | | 2C8 | 6.70 | 19.0 | | 25.0 |
| MAY 23 | 199 | 19 | 218 | 48 | 28.0 | 227 | 6.30 | 21.0 | 80 | 25.0K |
| JUNE 20 | | | | | | | | | | 40.0 |
| JULY 25 | | | | | | 295 | 7.20 | 25.0 | | 25.0K |
| AUG. 22 | 125 | 26 | 151 | 46 | 20.0 | 175 | 7.1C | 28.0 | 60 | 30.0 |
| SEP. 19 | | | | | | 203 | 7.00 | 27.0 | | 45.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BCD 5 DAY MG/L | FEC CCLI MFM-FCBR /100ML | TOT CCLI MFIMENDC /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 26 | 6.3 | | 1.1 | | | |
| NOV. 23 | 8.1 | | | 27 | 8CC | 93 |
| DEC. 14 | 8.0 | | 0.8 | | | |
| JAN. 25 | 7.0 | | | | | |
| FEB. 22 | 10.5 | | 1.3 | 20 | 227 | 22 |
| MAR. 14 | 7.0 | | 0.9 | | | |
| APR. 25 | 6.2 | | | | | |
| MAY 23 | 4.8 | | 1.1 | 139 | 1800 | |
| JUNE 20 | 4.8 | | 1.6 | | | |
| JULY 25 | 4.0 | 48.0 | 1.6 | | | |
| AUG. 22 | 5.8 | 73.0 | 2.2 | | | |
| SEP. 19 | 5.1 | 63.0 | 5.0L | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHRCMIUM CR,TCT UG/L | CHRCMIUM HEX-VAL UG/L | CCPPER CU,TOT UG/L | LEAC PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TCT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 22 | | 6 | 50K | | 15 | 100 | | 50K | 46 |
| SEP. 19 | | | | | | | | | |

K Less than.

## 07367695 LAFOURCHE BAYOU NEAR WILMOT, ARK.

LOCATION.--Lat 33°03'09", long 91°24'47", in SW¼SE¼ sec.9, T.19 S., R.3 W., Chicot County, at bridge on State Highway 52, 8.9 miles east of Wilmot.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1972.

REMARKS.--Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | | | | | | 211 | | 430 | | |
| NOV. 23 | | | | | | 224 | | 302 | | |
| DEC. 14 | | 1400 | 0.0 | 8.8 | 4.4 | 24 | 1K | 6 | 1.300 | 1.900 |
| JAN. 25 | | | | | | 45 | | 19 | | |
| FEB. 22 | | | | | | 58 | | 92 | | |
| MAR. 14 | | | | 17.6 | 5.8 | 44 | | 27 | 1.200 | 0.060 |
| APR. 25 | | | | | | 49 | | 24 | | |
| MAY 23 | | | | | | 119 | | 66 | | |
| JUNE 20 | | 950 | 180.0 | 27.2 | 1.5 | 41 | 30 | 24 | 3.000 | 1.180 |
| JULY 25 | | | | | | 83 | | 75 | | |
| AUG. 22 | | | | | | 176 | | 177 | | |
| SEP. 19 | | 650 | 220.0 | 61.0 | | 159 | 28 | 170 | 0.300 | 0.100 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26 | | | | | | 1176 | 7.80 | 20.0 | | 35.0 |
| NOV. 23 | | | | | | 1086 | 8.20 | 10.0 | | 25.0K |
| DEC. 14 | 152 | 109 | 261 | 40 | 22.0 | 68 | 6.80 | 14.0 | 160 | 180.0 |
| JAN. 25 | | | | | | 166 | 6.80 | 11.0 | | 100.0 |
| FEB. 22 | | | | | | 476 | 7.70 | | | 50.0 |
| MAR. 14 | 325 | 118 | 443 | 68 | 44.0 | 157 | 7.20 | 18.0 | 160 | 250.0 |
| APR. 25 | | | | | | 160 | 6.90 | 21.0 | | 330.0 |
| MAY 23 | | | | | | 392 | 8.70 | 30.0 | | 25.0K |
| JUNE 20 | 321 | 240 | 561 | 74 | 68.0 | 165 | 7.30 | 29.0 | 240 | 370.0 |
| JULY 25 | | | | | | 400 | 8.20 | 35.0 | | 25.0K |
| AUG. 22 | | | | | | 572 | 8.60 | 31.0 | | 12.0 |
| SEP. 19 | 580 | 53 | 633 | 276 | 152.0 | 901 | 8.30 | 29.0 | 15 | 25.0K |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| OCT. 26 | 4.2 | | 1.5 | | | |
| NOV. 23 | 8.1 | | | | | |
| DEC. 14 | 6.5 | | 3.2 | 1200 | 6200 | 13000 |
| JAN. 25 | 8.6 | | 1.6 | | | |
| FEB. 22 | 9.7 | | 2.0 | | | |
| MAR. 14 | 6.4 | | 1.4 | | | |
| APR. 25 | 5.5 | | 4.7 | | | |
| MAY 23 | 14.7 | | 5.8 | | | |
| JUNE 20 | 3.9 | | 3.3 | 275 | 800 | 185 |
| JULY 25 | 9.4 | 132.0 | 2.8 | | | |
| AUG. 22 | 10.5 | 140.0 | 9.3 | | | |
| SEP. 19 | 10.1 | 129.0 | 3.5 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JUNE 20 | | 4 | 100K | | 10 | 100K | 2.0K | 30K | 55 |
| SEP. 19 | | | | | 53 | | | | |

K Less than.

## 07367700 BOEUF RIVER NEAR ARKANSAS-LOUISIANA STATE LINE

LOCATION.--Lat 32°58'25", long 91°26'25", in NE¼NE¼ sec.21, T.23 N., R.10 E., Morehouse-West Carroll Parish line, at gaging station near left bank on downstream side of bridge on State Highway 835, 2.0 miles downstream from Arkansas-Louisiana State line, and 7.5 miles southwest of Kilbourne, La.

DRAINAGE AREA.--785 sq mi (see REMARKS).

PERIOD OF RECORD.--Chemical analyses: December 1971 to September 1972.

REMARKS.--Interconnecting system of bayous and drainage ditches produces an interchange of flow under varying conditions; hence, the drainage limits were more or less arbitrarily determined. Records furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, DECEMBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| DEC. 14 | | 1800 | 30.0K | 11.0 | 5.4 | 27 | 1K | 8 | 2.500 | 1.600 |
| JAN. 25 | | | | | | 77 | | 23 | | |
| FEB. 22 | | | | | | 58 | | 40 | | |
| MAR. 14 | | | | 20.0 | 5.8 | 45 | 1K | 15 | 1.700 | 0.060 |
| APR. 25 | | | | | | 44 | | 22 | | |
| MAY 23 | | | | | | 126 | | 53 | | |
| JUNE 20 | | 1050 | 280.0 | 19.2 | 8.3 | 54 | 24 | 22 | 2.500 | 1.140 |
| JULY 25 | | | | | | 104 | | 39 | | |
| AUG. 22 | | | | | | 142 | | 55 | | |
| SEP. 19 | | 1090 | 410.0 | 53.0 | | 167 | 17 | 70 | 0.240 | 0.070 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| DEC. 14 | 210 | 331 | 541 | 56 | 28.0 | 76 | 7.00 | 14.0 | 160 | 450.0 |
| JAN. 25 | | | | | | 133 | 7.60 | 9.0 | | 95.0 |
| FEB. 22 | | | | | | 317 | 7.80 | 11.0 | | 75.0 |
| MAR. 14 | 453 | 207 | 760 | 74 | 50.0 | 136 | 7.30 | 15.0 | 320 | 700.0 |
| APR. 25 | | | | | | 146 | 7.10 | 20.0 | | 360.0 |
| MAY 23 | | | | | | 382 | 8.60 | 29.0 | | 25.0K |
| JUNE 20 | 425 | 205 | 630 | 82 | 48.0 | 167 | 7.20 | 28.0 | 240 | 550.0 |
| JULY 25 | | | | | | 320 | 8.10 | 34.0 | | 25.0K |
| AUG. 22 | | | | | | 483 | 8.10 | 30.0 | | 16.0 |
| SEP. 19 | 41 | 356 | 397 | 202 | 132.0 | 565 | 8.00 | 28.0 | 20 | 40.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| DEC. 14 | 8.0 | | 3.7 | 2700 | 21000 | 11000 |
| JAN. 25 | 9.7 | | 1.6 | | | |
| FEB. 22 | 10.3 | | 3.2 | | | |
| MAR. 14 | 7.8 | | 2.2 | | | |
| APR. 25 | 7.0 | | 3.0 | | | |
| MAY 23 | 12.7 | | 6.6 | | | |
| JUNE 20 | 5.4 | | 2.7 | 300 | 2000 | 160 |
| JULY 25 | 8.4 | 117.0 | 3.0 | | | |
| AUG. 22 | 7.2 | | 1.9 | | | |
| SEP. 19 | 7.0 | | 3.0 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JUNE 20 | | 3 | 100K | | 10 | 100K | 5.0K | 30 | 88 |
| SEP. 19 | | | | | 42 | | | | |

K Less than.

## 07369700 BAYOU MACON NEAR KILBOURNE, LA.

LOCATION.--Lat 32°59'35", long 91°15'45", in SW¼SE¼ sec.8, T.23 N., R.12 E., East Carroll-West Carroll Parish line, at gaging station at bridge on Louisiana State Highway 585, 0.8 mile south of Arkansas-Louisiana State line, and 3.0 miles east of Kilbourne.

DRAINAGE AREA.--504 sq mi, arbitrarily determined.

PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1958, October 1967 to September 1972. Water temperatures: October 1967 to September 1968.

REMARKS.--Additional analyses furnished by Arkansas Department of Pollution Control and Ecology, Little Rock, Ark.

### CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | DIS-CHARGE (CFS) | DIS-SOLVED SILICA (SIO2) (MG/L) | DIS-SOLVED CAL-CIUM (CA) (MG/L) | DIS-SOLVED MAG-NE-SIUM (MG) (MG/L) | DIS-SOLVED SODIUM (NA) (MG/L) | DIS-SOLVED PO-TAS-SIUM (K) (MG/L) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | DIS-SOLVED SULFATE (SO4) (MG/L) | DIS-SOLVED CHLO-RIDE (CL) (MG/L) | DIS-SOLVED FLUO-RIDE (F) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | | |
| 21... | 101 | 9.9 | 42 | 15 | 21 | 3.8 | 205 | 0 | 168 | 19 | 23 | .3 |
| DEC. | | | | | | | | | | | | |
| 02... | 93 | 8.6 | 46 | 15 | 22 | 2.9 | 229 | 0 | 188 | 19 | 23 | .2 |
| JAN. | | | | | | | | | | | | |
| 19... | 744 | 4.2 | 29 | 7.9 | 12 | 3.7 | 124 | 0 | 102 | 15 | 14 | .1 |
| FEB. | | | | | | | | | | | | |
| 16... | 237 | 5.9 | 32 | 9.5 | 13 | 2.9 | 144 | 0 | 118 | 15 | 14 | .2 |
| APR. | | | | | | | | | | | | |
| 04... | 530 | 4.0 | 27 | 7.9 | 12 | 3.2 | 112 | 0 | 92 | 16 | 13 | .2 |
| MAY | | | | | | | | | | | | |
| 10... | 280 | 5.3 | 31 | 10 | 12 | 3.5 | 134 | 0 | 110 | 15 | 13 | .2 |
| JUNE | | | | | | | | | | | | |
| 14... | 126 | 8.9 | 33 | 9.1 | 15 | 4.5 | 139 | 0 | 114 | 17 | 14 | .4 |
| JULY | | | | | | | | | | | | |
| 25... | 128 | 9.5 | 41 | 12 | 18 | 2.8 | 184 | 0 | 151 | 14 | 18 | .2 |
| SEP. | | | | | | | | | | | | |
| 07... | 134 | 8.5 | 37 | 14 | 20 | 3.7 | 179 | 0 | 147 | 16 | 24 | .2 |

| DATE | DIS-SOLVED NITRATE (N) (MG/L) | DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L) | DIS-SOLVED SOLIDS (TONS PER AC-FT) | DIS-SOLVED SOLIDS (TONS PER DAY) | HARD-NESS (CA,MG) (MG/L) | NON-CAR-BONATE HARD-NESS (MG/L) | PERCENT SODIUM | SODIUM AD-SORP-TION RATIO | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | COLOR (PLAT-INUM-COBALT UNITS) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | | | | |
| 21... | .00 | 240 | .33 | 65.4 | 170 | 0 | 21 | .7 | 414 | 8.3 | 22.0 | 10 |
| DEC. | | | | | | | | | | | | |
| 02... | .00 | 251 | .34 | 63.4 | 180 | 0 | 21 | .7 | 427 | 7.5 | 7.0 | 5 |
| JAN. | | | | | | | | | | | | |
| 19... | .20 | 158 | .21 | 317 | 100 | 3 | 19 | .5 | 262 | 7.3 | 11.0 | 20 |
| FEB. | | | | | | | | | | | | |
| 16... | .40 | 176 | .24 | 113 | 120 | 1 | 19 | .5 | 287 | 7.4 | 10.4 | 15 |
| APR. | | | | | | | | | | | | |
| 04... | .40 | 145 | .20 | 207 | 100 | 8 | 20 | .5 | 251 | 7.9 | 16.0 | 20 |
| MAY | | | | | | | | | | | | |
| 10... | .20 | 174 | .24 | 132 | 120 | 9 | 18 | .5 | 296 | 7.0 | 21.0 | 10 |
| JUNE | | | | | | | | | | | | |
| 14... | .20 | 174 | .24 | 59.2 | 120 | 6 | 21 | .6 | 315 | 7.1 | 28.0 | 15 |
| JULY | | | | | | | | | | | | |
| 25... | .02 | 225 | .31 | 77.8 | 150 | 2 | 20 | .6 | 382 | 7.4 | 30.0 | 15 |
| SEP. | | | | | | | | | | | | |
| 07... | .00 | 231 | .31 | 83.6 | 150 | 3 | 22 | .7 | 382 | 7.3 | 29.0 | 10 |

## 07369700 BAYOU MACON NEAR KILBOURNE, LA.--continued

### ADDITIONAL CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| DEC. 14 | | 1800 | 30.0K | 20.0 | 6.3 | 60 | 1K | 9 | 1.400 | 2.100 |
| JAN. 25 | | | | | | 54 | | 15 | | |
| FEB. 22 | | | | | | 123 | | 14 | | |
| MAR. 14 | | | | 28.8 | 11.1 | 59 | 1K | 16 | 0.600 | 0.120 |
| APR. 25 | | | | | | 92 | | 12 | | |
| MAY 23 | | | | | | 146 | | 17 | | |
| JUNE 20 | | 500 | 222.0 | 41.6 | 11.7 | 141 | 23 | 15 | 0.100K | 0.380 |
| JULY 25 | | | | | | 148 | | 20 | | |
| AUG. 22 | | | | | | 165 | | 22 | | |
| SEP. 19 | | 1940 | 250.0 | 37.0 | | 132 | 12 | 26 | 0.490 | 0.110 |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| DEC. 14 | 204 | 251 | 455 | 78 | 52.0 | 133 | 7.30 | 15.0 | 160 | 350.0 |
| JAN. 25 | | | | | | 200 | 7.70 | 10.0 | | 140.0 |
| FEB. 22 | | | | | | 270 | 7.70 | 11.0 | | 100.0 |
| MAR. 14 | 244 | 76 | 320 | 118 | 72.0 | 219 | 8.10 | 16.0 | 60 | 150.0 |
| APR. 25 | | | | | | 206 | 7.20 | 21.0 | | 300.0 |
| MAY 23 | | | | | | 327 | 7.30 | 29.0 | | 25.0K |
| JUNE 20 | 73 | 198 | 271 | 152 | 104.0 | 274 | 7.60 | 29.0 | 30 | 105.0 |
| JULY 25 | | | | | | 335 | 7.80 | 33.0 | | 25.0K |
| AUG. 22 | | | | | | 417 | 7.90 | 30.0 | | 23.0 |
| SEP. 19 | 222 | 80 | 302 | 146 | 92.0 | 380 | 7.80 | | 30 | 75.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| DEC. 14 | 7.4 | | 2.4 | 1900 | 4000 | 10000 |
| JAN. 25 | 9.6 | | 2.0 | | | |
| FEB. 22 | 9.6 | | 1.8 | | | |
| MAR. 14 | 8.8 | | 1.4 | | | |
| APR. 25 | 6.1 | | 1.8 | | | |
| MAY 23 | 5.7 | | 1.7 | | | |
| JUNE 20 | 4.8 | | 3.2 | 491 | 296 | 104 |
| JULY 25 | 5.3 | 73.0 | 0.9 | | | |
| AUG. 22 | 6.1 | | 1.2 | | | |
| SEP. 19 | 5.4 | | 2.5 | | | |

| DATE | ARSENIC AS,TOT UG/L | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | CHROMIUM HEX-VAL UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | MERCURY HG,TOTAL UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|---|---|---|
| JUNE 20 | | 5 | 100K | | 10K | 200 | 6.0K | 30 | 11 |
| SEP. 19 | | | 50K | | 22 | | | 50K | |

K Less than.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | IMMEDIATE COLIFORM (COL PER 100 ML) | FECAL COLIFORM (COL. PER 100 ML) | STREPTOCOCCI (COLONIES PER 100 ML) | IMMEDIATE COLIFORM (COL. PER 100 ML) | FECAL COLIFORM (COL. PER 100 ML) | STREPTOCOCCI (COLONIES PER 100 ML) | IMMEDIATE COLIFORM (COL. PER 100 ML) | FECAL COLIFORM (COL. PER 100 ML) | STREPTOCOCCI (COLONIES PER 100 ML) |
|---|---|---|---|---|---|---|---|---|---|
| ST. FRANCIS RIVER BASIN | | | | | | | | | |
| BEAR CREEK LAKE NEAR MARIANNA, ARK. | | | | | | | | | |
| | (LAT 35 42 35 LONG 090 41 43) | | | (LAT 35 42 36 LONG 090 41 40) | | | (LAT 35 42 41 LONG 090 41 37) | | |
| JULY, 1972<br>27... | E30 | 7 | -- | E25 | <2 | -- | 52 | E3 | -- |
| AUG.<br>24... | 960 | -- | -- | E65 | 1 | -- | 100 | 3 | -- |
| SEP.<br>21... | E10 | E2 | -- | E10 | <2 | -- | E10 | <2 | -- |
| MISSISSIPPI RIVER BASIN | | | | | | | | | |
| STORM CREEK LAKE NEAR HELENA, ARK. | | | | | | | | | |
| | (LAT 34 35 46 LONG 093 36 52) | | | (LAT 34 35 50 LONG 093 36 41) | | | (LAT 34 35 50 LONG 093 36 46) | | |
| JULY, 1972<br>27... | E5 | 1 | -- | E5 | <2 | -- | E5 | <2 | -- |
| AUG.<br>24... | E5 | 0 | -- | E30 | 0 | -- | E20 | 0 | -- |
| SEP.<br>21... | 260 | E2 | -- | E60 | <2 | -- | E440 | <3 | -- |
| WHITE RIVER BASIN | | | | | | | | | |
| NORTH SYLAMORE CREEK ABOVE FIFTY SIX, ARK. | | | | | | | | | |
| | (LAT 36 01 08 LONG 092 15 00) | | | (LAT 36 01 08 LONG 092 15 00.01) | | | (LAT 36 01 08 LONG 092 15 00.02) | | |
| JULY, 1972<br>20... | E95 | 13 | -- | 200 | E43 | -- | 180 | E43 | -- |
| AUG.<br>25... | 80 | 6 | -- | 140 | 45 | -- | 140 | 35 | -- |
| SEP.<br>27... | E180 | 28 | -- | E160 | 25 | -- | E150 | 18 | -- |
| NORTH SYLAMORE CREEK NEAR FIFTY SIX, ARK. | | | | | | | | | |
| | (LAT 35 59 37 LONG 092 12 39) | | | (LAT 35 59 30 LONG 092 12 40) | | | | - | |
| JULY, 1972<br>20... | 96 | E17 | -- | 84 | E10 | -- | | - | |
| AUG.<br>25... | 150 | 58 | -- | 120 | 76 | -- | | - | |
| SEP.<br>27... | E220 | 72 | -- | E200 | 35 | -- | | - | |
| | (LAT 35 58 18 LONG 092 10 35) | | | (LAT 35 58 18 LONG 092 10 35.01) | | | (LAT 35 58 18 LONG 092 10 35.02) | | |
| JULY, 1972<br>20... | 100 | E43 | -- | 220 | 110 | -- | 84 | E13 | -- |
| AUG.<br>24... | 42 | 14 | -- | 80 | 7 | -- | 40 | 12 | -- |
| ARKANSAS RIVER BASIN | | | | | | | | | |
| LAKE WEDINGTON NEAR SAVOY, ARK. | | | | | | | | | |
| | (LAT 36 05 14 LONG 094 22 36) | | | (LAT 36 05 24 LONG 094 22 15) | | | (LAT 36 05 29 LONG 094 22 06) | | |
| JULY, 1972<br>24... | E24 | E3 | -- | E20 | <3 | -- | E32 | E7 | -- |
| AUG.<br>24... | E30 | 4 | -- | E15 | 2 | -- | E60 | 3 | -- |
| SEP.<br>19... | 180 | 0 | -- | E65 | 2 | -- | 140 | 0 | -- |
| SUGAR CREEK NEAR WALDRON, ARK. | | | | | | | | | |
| | (LAT 35 00 22 LONG 093 51 41.01) | | | (LAT 35 02 01 LONG 093 50 45.01) | | | | - | |
| JUNE, 1972<br>12... | E200 | E20 | E22 | E130 | E8 | E38 | | - | |

< LESS THAN.
E ESTIMATED.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | IMME- DIATE COLI- FORM (COL. PER 100 ML) | FECAL COLI- FORM (COL. PER 100 ML) | STREP- TOCOCCI (COL- ONIES PER 100 ML) | IMME- DIATE COLI- FORM (COL. PER 100 ML) | FECAL COLI- FORM (COL. PER 100 ML) | STREP- TOCOCCI (COL- ONIES PER 100 ML) | IMME- DIATE COLI- FORM (COL. PER 100 ML) | FECAL COLI- FORM (COL. PER 100 ML) | STREP- TOCOCCI (COL- ONIES PER 100 ML) |
|---|---|---|---|---|---|---|---|---|---|
| ARKANSAS RIVER BASIN--CONTINUED | | | | | | | | | |
| CEDAR LAKE NEAR HEAVENER, OKLA. | | | | | | | | | |
| | (LAT 35 46 45 LONG 094 41 51) | | | (LAT 35 46 49 LONG 094 41 42.01) | | | (LAT 35 46 49 LONG 094 41 42.02) | | |
| JUNE, 1972 | | | | | | | | | |
| 12... | E70 | E16 | E14 | E150 | E20 | E2 | E80 | E12 | E8 |
| LAKE OZARK NEAR MULBERRY, ARK. | | | | | | | | | |
| | (LAT 35 29 32 LONG 094 02 08) | | | | - | | | - | |
| AUG. 1972 | | | | | | | | | |
| 14... | 67 | E55 | -- | | - | | | - | |
| SEP. | | | | | | | | | |
| 18... | 170 | 50 | -- | | - | | | - | |
| SHORES LAKE NEAR MULBERRY, ARK. | | | | | | | | | |
| | (LAT 35 38 10 LONG 093 57 37) | | | (LAT 35 38 15 LONG 093 57 31) | | | (LAT 35 38 20 LONG 093 57 25) | | |
| JULY, 1972 | | | | | | | | | |
| 24... | E30 | 1 | -- | E10 | 3 | -- | 10 | 4 | -- |
| SEP. | | | | | | | | | |
| 19... | E60 | -- | -- | 100 | -- | -- | E25 | -- | -- |
| COVE LAKE NEAR PARIS, ARK. | | | | | | | | | |
| | (LAT 35 13 52 LONG 093 37 31) | | | (LAT 35 13 56 LONG 093 37 42) | | | (LAT 35 13 50 LONG 093 37 33) | | |
| JULY, 1972 | | | | | | | | | |
| 24... | 200 | E60 | -- | E30 | E30 | -- | -- | E20 | -- |
| AUG. | | | | | | | | | |
| 21... | <6 | <3 | -- | E20 | <3 | -- | E12 | <3 | -- |
| HORSEHEAD LAKE NEAR HARMONY, ARK. | | | | | | | | | |
| | (LAT 35 33 39 LONG 093 34 08) | | | (LAT 35 33 45 LONG 093 37 57) | | | (LAT 35 33 47 LONG 093 37 50) | | |
| AUG. 1972 | | | | | | | | | |
| 21... | E85 | 23 | -- | E53 | 3 | -- | 200 | 58 | -- |
| SEP. | | | | | | | | | |
| 19... | E80 | 8 | -- | E50 | 1 | -- | E60 | 3 | -- |
| LAKE DARDANELLE NEAR CLARKSVILLE, ARK. | | | | | | | | | |
| | (LAT 35 25 28 LONG 093 28 29) | | | | - | | | - | |
| AUG. 1972 | | | | | | | | | |
| 14... | E40 | <6 | -- | | - | | | - | |
| SEP. | | | | | | | | | |
| 18... | 160 | 7 | -- | | - | | | - | |
| LAKE DARDANELLE NEAR PINEY, ARK. | | | | | | | | | |
| | (LAT 35 21 14 LONG 093 19 51) | | | | - | | | - | |
| AUG. 1972 | | | | | | | | | |
| 14... | E25 | E12 | -- | | - | | | - | |
| SEP. | | | | | | | | | |
| 18... | 83 | 6 | -- | | - | | | - | |
| LAKE DARDANELLE NEAR HICKEYTOWN, ARK. | | | | | | | | | |
| | (LAT 35 23 56 LONG 093 18 50) | | | | - | | | - | |
| AUG. 1972 | | | | | | | | | |
| 14... | 130 | <6 | -- | | - | | | - | |
| SEP. | | | | | | | | | |
| 18... | 70 | 1 | -- | | - | | | - | |
| LAKE DARDANELLE NEAR RUSSELLVILLE, ARK. | | | | | | | | | |
| | (LAT 35 18 22 LONG 093 10 14) | | | | - | | | - | |
| AUG. 1972 | | | | | | | | | |
| 14.... | 60 | <6 | -- | | - | | | - | |
| SEP. | | | | | | | | | |
| 18... | E27 | 0 | -- | | - | | | - | |

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E ESTIMATED.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | IMME-DIATE COLI-FORM (COL. PER 100 ML) | FECAL COLI-FORM (COL. PER 100 ML) | STREP-TOCOCCI (COL-ONIES PER 100 ML) | IMME-DIATE COLI-FORM (COL. PER 100 ML) | FECAL COLI-FORM (COL. PER 100 ML) | STREP-TOCOCCI (COL-ONIES PER 100 ML) | IMME-DIATE COLI-FORM (COL. PER 100 ML) | FECAL COLI-FORM (COL. PER 100 ML) | STREP-TOCOCCI (COL-ONIES PER 100 ML) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | ARKANSAS RIVER BASIN--CONTINUED | | | | | |
| | | | | BIG PINEY CREEK NEAR DOVER, ARK. | | | | | |
| | (LAT 35 32 58 LONG 093 09 30.01) | | | (LAT 35 32 58 LONG 093 09 30.02) | | | (LAT 35 32 58 LONG 093 09 30.03) | | |
| JULY 1972<br>24... | 52 | 33 | -- | 700 | 180 | -- | 68 | 9 | -- |
| AUG.<br>21... | E110 | 6 | -- | E76 | 33 | -- | 120 | 27 | -- |
| SEP.<br>27... | 250 | 14 | -- | >320 | 2 | -- | 160 | 7 | -- |
| | | | | SPRING LAKE NEAR BELLEVILLE, ARK. | | | | | |
| | (LAT 35 09 06 LONG 093 25 41) | | | (LAT 35 09 08 LONG 093 25 47) | | | (LAT 35 09 11 LONG 093 25 41) | | |
| JULY 1972<br>24... | 310 | >230 | -- | 450 | >230 | -- | 390 | >230 | -- |
| AUG.<br>21... | 92 | E3 | -- | E44 | <3 | -- | E40 | <3 | -- |
| | | | | SUGAR CREEK NEAR BOONEVILLE, ARK. | | | | | |
| | (LAT 35 02 01 LONG 093 50 45.01) | | | (LAT 35 02 01 LONG 093 50 45.02) | | | (LAT 35 02 01 LONG 093 50 45.03) | | |
| JUNE 1972<br>12... | E120 | E8 | E18 | E160 | E8 | E18 | E60 | 92 | E22 |
| | | | | MILL CREEK NEAR Y CITY, ARK. | | | | | |
| | (LAT 34 43 44 LONG 093 58 32.01) | | | (LAT 34 43 44 LONG 093 58 32.02) | | | (LAT 34 43 44 LONG 093 58 32.03) | | |
| JUNE 1972<br>12... | E50 | E2 | E14 | E180 | E4 | E22 | E50 | E4 | E6 |
| | | | | LAKE SYLVIA NEAR WILLIAMS JUNCTION, ARK. | | | | | |
| | (LAT 34 52 04 LONG 092 49 16) | | | (LAT 34 52 05 LONG 092 49 26) | | | (LAT 34 52 07 LONG 092 49 21) | | |
| MAY 1972<br>15... | 64 | E4 | E4 | 94 | E4 | E4 | 72 | E6 | E6 |
| JUNE<br>12... | 410 | E280 | 160 | 500 | 140 | 64 | 460 | 170 | 58 |
| | | | | RED RIVER BASIN | | | | | |
| | | | | KULLI LAKE NEAR IDABEL, OKLA. | | | | | |
| | (LAT 33 49 26 LONG 094 44 11) | | | (LAT 33 49 27 LONG 094 44 07) | | | (LAT 33 49 30 LONG 094 44 14) | | |
| JUNE 1972<br>12... | E90 | E16 | 54 | E120 | E20 | 60 | E110 | E32 | E28 |
| | | | | BLAYLOCK CREEK NEAR ATHENS, ARK. | | | | | |
| | (LAT 34 23 33 LONG 094 00 54.01) | | | (LAT 34 23 33 LONG 094 00 54.02) | | | | - | |
| JUNE 1972<br>12... | 210 | E12 | 68 | E80 | E16 | 84 | | - | |
| | | | | SHADY LAKE NEAR ATHENS, ARK. | | | | | |
| | (LAT 34 21 42 LONG 094 01 40) | | | (LAT 34 21 47 LONG 094 01 47) | | | | - | |
| JUNE 1972<br>12... | E140 | E56 | E26 | 230 | 150 | 10 | | - | |
| | | | | LAKE CLEARFORK NEAR CRYSTAL SPRINGS, ARK. | | | | | |
| | (LAT 34 30 28 LONG 093 23 29) | | | (LAT 34 30 28 LONG 093 23 31) | | | (LAT 34 30 28 LONG 093 23 34) | | |
| JUNE 1972<br>12... | 210 | E12 | 52 | E150 | E4 | E2 | E40 | E4 | E2 |

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< LESS THAN.
E ESTIMATED.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DATE | IMMEDIATE COLIFORM (COL. PER 100 ML) | FECAL COLIFORM (COL. PER 100 ML) | STREPTOCOCCI (COLONIES PER 100 ML) | IMMEDIATE COLIFORM (COL. PER 100 ML) | FECAL COLIFORM (COL. PER 100 ML) | STREPTOCOCCI (COLONIES PER 100 ML) | IMMEDIATE COLIFORM (COL. PER 100 ML) | FECAL COLIFORM (COL. PER 100 ML) | STREPTOCOCCI (COLONIES PER 100 ML) |
|---|---|---|---|---|---|---|---|---|---|
| RED RIVER BASIN--CONTINUED | | | | | | | | | |
| WALNUT CREEK NEAR CRYSTAL SPRINGS, ARK. | | | | | | | | | |
| | (LAT 34 30 56 LONG 093 22 53) | | | (LAT 34 31 02 LONG 093 22 57) | | | | - | |
| JUNE 1972<br>12... | 230 | E12 | 52 | E130 | E12 | E20 | | - | |
| MAZARN CREEK NEAR PEARCY, ARK. | | | | | | | | | |
| | (LAT 34 26 59 LONG 093 18 18.01) | | | (LAT 34 26 59 LONG 093 18 18.02) | | | | - | |
| JUNE 1972<br>12... | E70 | 120 | 62 | 260 | E64 | 64 | | - | |
| MONTGOMERY CREEK NEAR NORMAN, ARK. | | | | | | | | | |
| | (LAT 34 28 38 LONG 093 38 27.01) | | | (LAT 34 28 38 LONG 093 38 27.02) | | | | - | |
| JUNE 1972<br>12... | E150 | 41 | 110 | >80 | E100 | E180 | | - | |
| LITTLE MISSOURI RIVER NEAR LANGLEY, ARK. | | | | | | | | | |
| | (LAT 34 21 47 LONG 093 52 59.01) | | | (LAT 34 21 47 LONG 093 52 59.02) | | | | - | |
| JUNE 1972<br>12... | E180 | E24 | 72 | 250 | E28 | 84 | | - | |
| MIDDLE FORK SALINE RIVER NEAR JESSIEVILLE, ARK. | | | | | | | | | |
| | (LAT 34 45 41 LONG 093 04 22.01) | | | (LAT 34 45 41 LONG 093 04 22.02) | | | | - | |
| JUNE 1972<br>12... | 680 | E12 | E240 | 450 | E52 | 160 | | - | |

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E ESTIMATED.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

## WHITE RIVER BASIN

### 0749690 BEAVER LAKE NEAR EUREKA SPRINGS, ARK. (LAT 36 25 15 LONG 093 50 50)

REMARKS.--RECORDS FURNISHED BY CORPS OF ENGINEERS, LITTLE ROCK, ARK.

NOVEMBER 19, 1971

| DEPTH | DIS-SOLVED OXYGEN (MG/L) | TEMP. (°C) | SPE-CIFIC CON-DUC-TANCE (MICRO-MHOS) | DEPTH | DIS-SOLVED OXYGEN (MG/L) | TEMP. (°C) | SPE-CIFIC CON-DUC-TANCE (MICRO-MHOS) | DEPTH | DIS-SOLVED OXYGEN (MG/L) | TEMP. (°C) | SPE-CIFIC CON-DUC-TANCE (MCRO-MHOS) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 9.6 | 15.5 | 160 | 40 | 9.6 | 15.5 | 160 | 80 | 2.4 | 9.0 | 165 |
| 10 | 9.6 | 15.5 | 160 | 50 | 9.4 | 15.0 | 160 | 100 | 1.8 | 8.5 | 165 |
| 20 | 9.6 | 15.5 | 160 | 60 | 1.6 | 10.5 | 160 | 150 | .6 | 8.0 | 170 |
| 30 | 9.6 | 15.5 | 160 | 70 | 2.2 | 10.0 | 160 | 170 | .6 | 8.0 | 190 |

JULY 14, 1972

| DEPTH | DIS-SOLVED OXYGEN (MG/L) | TEMP. (°C) | SPE-CIFIC CON-DUC-TANCE (MICRO-MHOS) | DEPTH | DIS-SOLVED OXYGEN (MG/L) | TEMP. (°C) | SPE-CIFIC CON-DUC-TANCE (MICRO-MHOS) | DEPTH | DIS-SOLVED OXYGEN (MG/L) | TEMP. (°C) | SPE-CIFIC CON-DUC-TANCE (MCRO-MHOS) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 7.9 | 27.0 | 150 | 65 | 5.5 | 10.5 | -- | 125 | 4.8 | 7.5 | 178 |
| 10 | 7.8 | 27.0 | 150 | 70 | 5.5 | 10.0 | 170 | 130 | 4.8 | 7.5 | 178 |
| 15 | 8.0 | 26.5 | 150 | 75 | 5.3 | 9.5 | -- | 135 | 4.6 | 7.5 | 178 |
| 20 | 7.9 | 26.0 | 150 | 80 | 5.4 | 9.0 | 173 | 140 | 4.4 | 7.5 | 178 |
| 25 | 8.6 | 24.0 | 155 | 85 | 5.6 | 8.5 | 178 | 145 | 4.2 | 7.5 | 178 |
| 30 | 9.3 | 22.0 | 155 | 90 | 5.8 | 8.0 | 178 | 150 | 4.0 | 7.5 | 178 |
| 35 | 8.5 | 18.0 | 155 | 95 | 5.6 | 8.0 | 178 | 155 | 4.0 | 7.5 | 178 |
| 40 | 8.5 | 15.5 | 160 | 100 | 5.6 | 7.5 | 178 | 160 | 4.0 | 7.5 | 178 |
| 45 | 6.1 | 14.0 | 165 | 105 | 5.6 | 7.5 | 178 | 165 | 4.0 | 7.5 | 178 |
| 50 | 5.6 | 13.0 | 168 | 110 | 5.6 | 7.5 | 178 | 170 | 4.0 | 7.5 | 178 |
| 55 | 5.4 | 12.0 | 170 | 115 | 5.2 | 7.5 | 178 | 175 | 4.0 | 7.5 | 178 |
| 60 | 5.5 | 11.0 | 170 | 120 | 4.8 | 7.5 | 178 | 180 | 4.2 | 8.0 | 171 |

### 07050110 WHITE RIVER NEAR GOLDEN, MO. (LAT 36 31 56 LONG 093 42 52)

REMARKS.--RECORDS FURNISHED BY ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY, LITTLE ROCK, ARK.

| DATE | STREAM FLOW CFS | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 05, 1971 | 20 | 24.0 | 4.9 | 60 | 4 | 4 | <0.100 | 0.220 | 76 | 2 |
| OCT. 15...... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT. 19...... | -- | -- | -- | 58 | -- | 3 | -- | -- | -- | -- |

| DATE | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB J SN JTU | DO MG/L | BOD 5 DAY MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 05, 1971 | 78 | 80 | 60.0 | 139 | 8.60 | 21.0 | 0 | 25.0 | 9.3 | 1.6 |
| OCT. 15...... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT. 19...... |  |  |  | 125 | 8.20 | 19.0 | -- | 25.0 | 8.7 | 1.5 |

| DATE | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MG M-ENT /100ML |
|---|---|---|---|
| OCT. 05, 1971 | -- | -- | -- |
| OCT. 15...... | <4 | <4 | <4 |
| OCT. 19...... | -- | -- | -- |

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## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

## WHITE RIVER BASIN -CONTINUED

### 07050510 KINGS RIVER NEAR GOLDEN, MO. (LAT 36 30 29 LONG 093 34 51)

REMARKS.--RECORDS FURNISHED BY ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY, LITTLE ROCK, ARK.

| DATE | STREAM FLOW CFS | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 05, 1971 | 27 | 37.6 | 11.7 | 137 | 6 | 7 | 0.100 | 2.040 | 161 | 9 |
| OCT. 15...... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT. 19...... | -- | -- | -- | 141 | -- | 5 | -- | -- | -- | -- |

| DATE | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTBY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU | DO MG/L | BOD 5 DAY MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 05, 1971 | 170 | 142 | 94.0 | 273 | 8.90 | 21.0 | 0 | <25.0 | 12.5 | 4.2 |
| OCT. 15...... | -- | -- | -- | 286 | 8.00 | 17.5 | -- | <25.0 | -- | -- |
| OCT. 19...... | -- | -- | -- | -- | -- | -- | -- | -- | 6.5 | 2.5 |

| DATE | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MG M-ENT /100ML |
|---|---|---|---|
| OCT. 05, 1971 | -- | -- | -- |
| OCT. 15...... | <7 | <13 | 67 |
| OCT. 19...... | -- | -- | -- |

### 07069195 SPRING RIVER AT MAMMOTH SPRINGS, ARK. (LAT 36 29 36 LONG 091 31 57)

REMARKS.--RECORDS FURNISHED BY ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY, LITTLE ROCK, ARK.

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 06, 1971 | 12 | -- | -- | -- | -- | 370 | -- | 3 | -- | -- |
| OCT. 20...... | 12 | -- | -- | -- | -- | 277 | -- | 5 | -- | -- |
| NOV. 02...... | 12 | -- | -- | -- | -- | 284 | -- | 3 | -- | -- |
| NOV. 16...... | 7 | <50 | <100.0 | 59.2 | 37.4 | 294 | 6 | 5 | <0.100 | <0.010 |
| DEC. 01...... | 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC. 15...... | 317 | -- | -- | -- | -- | 153 | -- | 3 | -- | -- |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 06, 1971 | -- | -- | -- | -- | -- | 512 | 8.30 | -- | -- | -- |
| OCT. 20...... | -- | -- | -- | -- | -- | 400 | 8.10 | 20.0 | -- | <25.0 |
| NOV. 02...... | -- | -- | -- | -- | -- | 500 | 8.10 | 16.0 | -- | <25.0 |
| NOV. 16...... | 294 | 3 | 297 | 302 | 148.0 | 454 | 8.10 | 15.0 | 0 | <25.0 |
| DEC. 15...... | -- | -- | -- | -- | -- | 232 | 8.00 | 13.0 | -- | 45.0 |

| DATE | DO MG/L | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MG M-ENT / 100ML |
|---|---|---|---|---|---|
| OCT. 06, 1971 | 10.9 | 2.2 | -- | -- | -- |
| OCT. 20...... | 9.8 | 2.2 | -- | -- | -- |
| NOV. 02...... | 7.8 | 1.3 | -- | -- | -- |
| NOV. 16...... | 11.0 | 1.6 | 27 | 120 | 120 |
| DEC. 15...... | 9.3 | 1.6 | -- | -- | -- |

### 07071995 ELEVEN POINT RIVER AT DALTON, MO. (LAT 36 25 07 LONG 091 08 19)

REMARKS.--RECORDS FURNISHED BY ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY, LITTLE ROCK, ARK.

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 06, 1971 | 399 | -- | -- | -- | -- | 138 | -- | 6 | -- | -- |
| OCT. 20...... | 387 | -- | -- | -- | -- | 218 | -- | 1 | -- | -- |
| NOV. 02...... | 361 | -- | -- | -- | -- | 221 | -- | 2 | -- | -- |
| NOV. 16...... | 355 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV. 17...... | -- | <50 | <100.0 | 44.8 | 28.2 | 217 | 9 | 3 | <0.100 | <0.010 |
| DEC. 15...... | 3550 | -- | -- | -- | -- | 169 | -- | 4 | -- | -- |

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## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

## WHITE RIVER BASIN--CONTINUED

### 07071995 ELEVEN POINT RIVER AT DALTON, MO. (LAT 36 25 07 LONG 091 08 19)--CONTINUED

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CONDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 06, 1971 | -- | -- | -- | -- | -- | 286 | 8.10 | -- | -- | -- |
| OCT. 20...... | -- | -- | -- | -- | -- | 333 | 8.30 | 17.0 | -- | <25.0 |
| NOV. 02...... | -- | -- | -- | -- | -- | 312 | 8.40 | 16.0 | -- | <25.0 |
| NOV. 16...... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV. 17...... | 208 | 7 | 215 | 228 | 112.0 | 333 | 8.40 | 15.0 | 0 | <25.0 |
| DEC. 15...... | -- | -- | -- | -- | -- | 238 | 8.00 | 11.0 | -- | 30.0 |

| DATE | DO MG/L | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MG M-ENT /100ML |
|---|---|---|---|---|---|
| OCT. 06, 1971 | 9.9 | 0.7 | -- | -- | -- |
| OCT. 20...... | 9.3 | 0.9 | -- | -- | -- |
| NOV. 02...... | 9.1 | 0.5 | -- | -- | -- |
| NOV. 16...... | -- | -- | <4 | 50 | 27 |
| NOV. 17...... | 9.9 | 1.6 | -- | -- | -- |
| DEC. 15 | 9.4 | 0.8 | -- | -- | -- |

### 07075000 MIDDLE FORK LITTLE RED RIVER AT SHIRLEY, ARK. (LAT 35 39 10 LONG 092 19 10)

REMARKS.--RECORDS FURNISHED BY CORPS OF ENGINEERS, LITTLE ROCK, ARK.

| DATE | DISSOLVED OXYGEN MG/L | TEMPERATURE °C | SPECIFIC CONDUCTANCE MICROMHOS | DATE | DISSOLVED OXYGEN MG/L | TEMPERATURE °C | SPECIFIC CONDUCTANCE MICROMHOS |
|---|---|---|---|---|---|---|---|
| FEB. 10, 1972 | 10.1 | 5.0 | 50 | APR. 06, 1972 | 9.4 | 13.0 | 112 |
| FEB. 10...... | 9.5 | 5.0 | 50 | APR. 06...... | 8.9 | 13.2 | 112 |
| MAR. 13...... | 9.9 | 15.0 | 95 | MAY 11...... | 9.3 | 18.5 | 76 |
| MAR. 13...... | 9.0 | 15.0 | 95 | MAY 11...... | 9.1 | 18.5 | 72 |

### 07075300 SOUTH FORK LITTLE RED RIVER AT CLINTON, ARK. (LAT 35 35 29 LONG 092 27 20)

REMARKS.--RECORDS FURNISHED BY CORPS OF ENGINEERS, LITTLE ROCK, ARK.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FEB. 10, 1972 | 9.3 | 5.0 | 55 | APR. 06, 1972 | 9.5 | 13.2 | 32 |
| FEB. 10...... | 9.3 | 5.0 | 55 | APR. 06...... | 9.4 | 13.4 | 32 |
| MAR. 13...... | 9.9 | 15.0 | 33 | MAY 11...... | 10.1 | 17.1 | 40 |
| MAR. 13...... | 9.3 | 15.0 | 33 | MAY 11...... | 10.7 | 16.5 | 38 |

### 07075390 ARCHEY CREEK AT CLINTON, ARK. (LAT 35 36 LONG 092 27)

REMARKS.--RECORDS FURNISHED BY CORPS OF ENGINEERS, LITTLE ROCK, ARK.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MAR. 13, 1972 | 9.9 | 15.0 | 60 | APR. 06, 1972 | 9.4 | 13.0 | 38 |
| MAR. 13...... | 9.8 | 15.2 | 57 | MAY 11...... | 9.8 | 16.5 | 49 |
| APR. 06...... | 9.8 | 12.8 | 38 | MAY 11...... | 10.0 | 15.9 | 48 |

## ARKANSAS RIVER BASIN

### 07191179 SPAVINAW CREEK NORTH OF CHEROKEE CITY, ARK. (LAT 36 20 31 LONG 094 35 18)

REMARKS.--RECORDS FURNISHED BY ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY, LITTLE ROCK, ARK.

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 05, 1971 | 18 | -- | -- | -- | -- | 129 | -- | 10 | -- | -- |
| OCT. 19...... | -- | <50 | <30.0 | 52.0 | 2.4 | 124 | 4 | 9 | 1.300 | 0.200 |
| OCT. 20...... | 15 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV. 01...... | 18 | -- | -- | -- | -- | 129 | -- | 10 | -- | -- |
| JAN. 24, 1972 | 32 | -- | -- | -- | -- | 106 | -- | 8 | -- | -- |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CONDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 05, 1971 | -- | -- | -- | -- | --- | 308 | 7.80 | 18.0 | -- | <25.0 |
| OCT. 19...... | 167 | 20 | 187 | 140 | 130.0 | 333 | 7.80 | -- | 0 | 50.0 |
| OCT. 20...... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV. 01...... | -- | -- | -- | -- | -- | 242 | 7.60 | 17.0 | -- | <25.0 |
| JAN. 24, 1972 | -- | -- | -- | -- | -- | 200 | 7.80 | 9.0 | -- | <25.0 |

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## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

### ARKANSAS RIVER BASIN--CONTINUED

### 07191179 SPAVINAW CREEK NORTH OF CHEROKEE CITY, ARK. (LAT 36 20 31 LONG 094 35 18)--CONTINUED

| DATE | DO MG/L | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MG M-ENT /100ML |
|---|---|---|---|---|---|
| OCT. 05, 1971 | 9.2 | 1.5 | -- | -- | -- |
| OCT. 19...... | 9.3 | 1.1 | -- | -- | -- |
| OCT. 20...... | -- | -- | 160 | 1400 | 2600 |
| NOV. 01...... | 9.7 | 0.5 | -- | -- | -- |
| JAN. 24, 1972 | 11.3 | 1.8 | -- | -- | -- |

### 07250000 LEE CREEK NEAR VAN BUREN, ARK. (LAT 35 29 40 LONG 094 26 50)

REMARKS.--RECORDS FURNISHED BY ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY, LITTLE ROCK, ARK.

| DATE | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|
| DEC. 13, 1971 | -- | -- | -- | -- | 79 | -- | -- | -- | -- |
| JAN. 24, 1972 | <100 | <100.0 | 10.4 | 8.3 | 30 | 4 | 4 | <0.100 | 0.100 |
| APR. 04...... | -- | -- | 14.4 | 4.4 | 30 | 5 | 6 | 0.100 | 0.120 |
| APR. 18...... | -- | -- | -- | -- | -- | -- | 2 | -- | -- |
| JULY 04...... | 280 | 60.0 | 15.0 | 4.4 | 36 | 11 | 5 | 0.200 | 0.210 |
| JULY 18...... | -- | -- | -- | -- | 140 | -- | 8 | -- | -- |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| DEC. 13, 1971 | -- | -- | -- | -- | -- | -- | --- | -- | -- | <25.0 |
| JAN. 24, 1972 | 50 | 12 | 62 | 60 | 26.0 | 58 | 7.10 | 9.0 | 5 | <25.0 |
| APR. 04...... | 74 | 3 | 77 | 54 | 36.0 | 91 | 7.70 | 14.0 | 5 | <25.0 |
| APR. 18...... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JULY 04...... | 116 | 35 | 151 | 56 | 38.0 | 114 | 7.00 | 19.0 | 80 | <25.0 |
| JULY 18...... | -- | -- | -- | -- | -- | 247 | 8.00 | 26.0 | -- | <25.0 |

| DATE | DO MG/L | DO SATUR PERCENT | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|---|
| DEC. 13, 1971 | 10.4 | -- | 1.0 | -- | -- | -- |
| JAN. 24, 1972 | 11.4 | -- | 1.1 | -- | -- | -- |
| JAN. 25...... | -- | -- | -- | <4 | 13 | <4 |
| APR. 04...... | 10.2 | -- | 1.3 | -- | -- | -- |
| JULY 04...... | 7.9 | 84.0 | 0.8 | -- | 1650 | 234 |
| JULY 18...... | 9.9 | -- | 2.7 | -- | -- | -- |

| DATE | CADMIUM CD,TOT UG/L | CHROMIUM CR,TOT UG/L | COPPER CU,TOT UG/L | LEAD PB,TOT UG/L | NICKEL NI,TOTAL UG/L | ZINC ZN,TOT UG/L |
|---|---|---|---|---|---|---|
| JULY 04, 1972 | <2 | 200 | <10 | <100 | 30 | <10 |

### 07250200 LEE CREEK AT VAN BUREN, ARK. (LAT 35 27 50 LONG 094 23 20)

REMARKS.--RECORDS FURNISHED BY ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY, LITTLE ROCK, ARK.

| DATE | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L |
|---|---|---|---|---|---|---|---|---|---|
| OCT. 05, 1971 | 16.0 | 1.0 | 48 | 6 | 7 | <0.100 | 0.280 | 78 | 3 |
| OCT. 15...... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU | DO MG/L | BOD 5 DAY MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 05, 1971 | 81 | 44 | 40.0 | 111 | 7.50 | 17.0 | 0 | <25.0 | 8.0 | 0.7 |
| OCT. 15...... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MG M-ENT /100ML |
|---|---|---|---|
| OCT. 05, 1971 | -- | -- | -- |
| OCT. 15...... | 37 | 90 | 97 |

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## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

## RED RIVER BASIN

### 07340595 LITTLE RIVER NEAR WILTON, ARK. (LAT 33 46 58 LONG 094 08 41)

REMARKS.--RECORDS FURNISHED BY CORPS OF ENGINEERS, TULSA, OKLA.

| DATE | DEPTH (FEET) | DISSOLVED OXYGEN (MG/L) | TEMPERATURE (°C) |
|---|---|---|---|
| JUNE 22, 1972 | 1 | 6.8 | 31.0 |
| | 5 | 6.1 | 31.0 |
| | 10 | 1.2 | 29.0 |
| | 15 | .2 | 26.0 |
| | 20 | .2 | 24.0 |
| JULY 26...... | 1 | 7.4 | 34.5 |
| | 5 | 6.4 | 32.0 |
| | 10 | 3.5 | 31.0 |
| | 15 | 1.0 | 27.0 |

| DATE | DEPTH (FEET) | DISSOLVED OXYGEN (MG/L) | TEMPERATURE (°C) |
|---|---|---|---|
| AUG. 10, 1972 | 1 | 6.3 | 32.0 |
| | 6 | 5.0 | 30.5 |
| | 16 | .5 | 26.5 |
| SEP. 14...... | 1 | 7.4 | 31.5 |
| | 5 | 7.0 | 30.0 |
| | 10 | 3.0 | 29.0 |
| | 15 | .2 | 28.0 |
| | 20 | .4 | 26.5 |

### 07341301 LITTLE RIVER AT MILLWOOD DAM, NEAR ASHDOWN, ARK. (LAT 33 41 20 LONG 093 58 18)

REMARKS.--RECORDS FURNISHED BY CORPS OF ENGINEERS, TULSA, OKLA.

| DATE | DEPTH (FEET) | DISSOLVED OXYGEN (MG/L) | TEMPERATURE (°C) |
|---|---|---|---|
| JUNE 22, 1972 | 1 | 6.7 | 30.0 |
| | 5 | 6.7 | 30.0 |
| | 10 | 6.5 | 30.0 |
| JULY 26...... | 1 | 7.6 | 31.5 |
| | 5 | 7.3 | 31.5 |
| AUG. 10...... | 1 | 7.6 | 30.0 |

| DATE | DEPTH (FEET) | DISSOLVED OXYGEN (MG/L) | TEMPERATURE (°C) |
|---|---|---|---|
| AUG. 10, 1972 | 5 | 7.4 | 30.0 |
| SEP. 14...... | 1 | 8.0 | 28.5 |
| | 5 | 8.0 | 28.5 |
| | 10 | 8.0 | 28.5 |
| | 15 | 8.4 | 28.5 |

### 07341500 RED RIVER AT FULTON, ARK. (LAT 33 36 26 LONG 093 48 49)

REMARKS.--RECORDS FURNISHED BY CORPS OF ENGINEERS, NEW ORLEANS, LA.

| DATE | DEPTH (FEET) | MEAN DISCHARGE (CFS) | CHLORIDE CL (MG/L) |
|---|---|---|---|
| OCT. 26, 1971 | 2.6 | 30000 | 175 |
| | 13.0 | 30000 | 175 |
| | 23.4 | 30000 | 164 |
| NOV. 16...... | 1.7 | 4600 | 18 |
| | 8.5 | 4600 | 18 |
| | 15.3 | 4600 | 18 |
| DEC. 21...... | 3.9 | 79000 | 11 |
| | 19.5 | 79000 | 14 |
| | 35.1 | 79000 | 10 |
| FEB. 29, 1972 | 6.5 | 7600 | 128 |
| | 16.5 | 7600 | 135 |
| MAR. 28...... | 6.0 | 7300 | 106 |

| DATE | DEPTH (FEET) | MEAN DISCHARGE (CFS) | CHLORIDE CL (MG/L) |
|---|---|---|---|
| MAR. 28, 1972 | 8.6 | 7300 | 110 |
| APR. 25...... | 7.9 | 20000 | 85 |
| | 12.0 | 20000 | 89 |
| MAY 30...... | 6.3 | 4600 | 181 |
| | 7.2 | 4600 | 188 |
| JUNE 27...... | 7.8 | 4500 | 248 |
| 28...... | 7.8 | 4700 | 248 |
| JULY 28....... | 7.8 | 2700 | 248 |
| SEP. 26....... | 4.7 | 4400 | 174 |
| | 7.8 | 4400 | 174 |

### 07342380 MCKINNEY BAYOU NEAR FOUKE, ARK. (LAT 33 13 36 LONG 093 50 00)

REMARKS.--RECORDS FURNISHED BY ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY, LITTLE ROCK, ARK.

| DATE | CHLORIDE CL MG/L | CNDUCTVY AT 25C MICROMHO | WATER TEMP CENT |
|---|---|---|---|
| OCT. 04, 1971 | 41 | -- | 26.0 |
| NOV. 30...... | 220 | 625 | 8.0 |
| JAN. 11, 1972 | 38 | 200 | 10.0 |
| JUNE 19...... | 4 | -- | -- |

### 07342400 MCKINNEY BAYOU NEAR FORT LYNN, ARK. (LAT 33 09 36 LONG 093 50 18)

REMARKS.--RECORDS FURNISHED BY ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY, LITTLE ROCK, ARK.

| DATE | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|
| NOV. 10, 1971 | 360 | 340.0 | 49.6 | 20.9 | 68 | 43 | 135 | 0.100 | 0.250 |

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## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

## RED RIVER BASIN--CONTINUED

### 07342400 MCKINNEY BAYOU NEAR FORT LYNN, ARK. (LAT 33 09 36 LONG 093 50 18)--CONTINUED

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| NOV. 10, 1971 | 427 | 72 | 499 | 210 | 124.0 | 588 | 7.30 | 12.0 | 5 | <25.0 |

| DATE | DO MG/L | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|
| NOV. 02, 1971 | -- | -- | 43 | 1000 | 20 |
| NOV. 10...... | 12.4 | 2.3 | -- | -- | -- |

### 07348615 BAYOU DORCHEAT NEAR BUSSEY, ARK. (LAT 33 12 24 LONG 093 23 57)

REMARKS.--RECORDS FURNISHED BY ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY, LITTLE ROCK, ARK.

| DATE | CHLORIDE CL MG/L | CNDUCTVY AT 25C MICROMHO | WATER TEMP CENT | DATE | CHLORIDE CL MG/L | CNDUCTVY AT 25C MICROMHO | WATER TEMP CENT |
|---|---|---|---|---|---|---|---|
| OCT. 05, 1971 | 68 | -- | 21.0 | APR. 11, 1972 | 195 | 606 | 19.0 |
| NOV. 09...... | 110 | 350 | -- | MAY 09...... | 233 | -- | 17.0 |
| NOV. 30...... | 750 | 1388 | 9.0 | JUNE 06...... | 230 | 658 | 21.0 |
| JAN. 11, 1972 | 106 | 500 | 10.0 | JULY 11...... | 732 | 1639 | 23.0 |
| FEB. 08...... | 123 | 325 | 8.0 | AUG. 08...... | 740 | 1800 | 33.0 |
| FEB. 29...... | 255 | 714 | 13.0 | SEP. 05...... | 370 | 1240 | 25.0 |

### 07349455 BEAR CREEK NEAR ARKANA, ARK. (LAT 33 01 56 LONG 093 37 37)

REMARKS.--RECORDS FURNISHED BY ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY, LITTLE ROCK, ARK.

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | PHOS-T P-WET MG/L | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L |
|---|---|---|---|---|---|---|---|---|---|
| JAN. 11, 1972 | 1 | -- | -- | -- | -- | 2 | - | -- | -- |
| FEB. 08...... | 0 | -- | -- | -- | -- | 17 | - | -- | -- |
| FEB. 29...... | 0 | 3800 | 400.0 | 34 | 4 | 74 | 0.180 | 42 | 230 |
| APR. 11...... | 0 | -- | -- | 26 | -- | 4 | -- | -- | -- |
| MAY 09...... | -- | -- | -- | 33 | -- | 4 | -- | -- | -- |

| DATE | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU | DO MG/L | BOD 5 DAY MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| JAN. 11, 1972 | -- | -- | -- | 32 | -- | 8.0 | -- | -- | -- | -- |
| FEB. 08...... | -- | -- | -- | 62 | -- | 5.0 | -- | -- | -- | -- |
| FEB. 29...... | 272 | 68 | 30.0 | 250 | 6.70 | 15.0 | 140 | 25.0 | 5.6 | 1.4 |
| APR. 11...... | -- | -- | -- | 86 | 6.50 | 20.0 | -- | 30.0 | 3.0 | 3.0 |
| MAY 09...... | -- | -- | -- | 65 | 6.40 | 18.0 | -- | 75.0 | 5.6 | 3.6 |

### 07362390 OUACHITA RIVER AT CALION, ARK. (LAT 33 20 19 LONG 092 31 47)

REMARKS.--RECORDS FURNISHED BY ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY, LITTLE ROCK, ARK.

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26, 1971 | 850 | 500 | 100.0 | 14.4 | 3.9 | 20 | 14 | 72 | 1.500 | 0.580 |
| NOV. 23...... | 2300 | -- | -- | -- | -- | 17 | -- | 102 | -- | -- |
| DEC. 14...... | 22000 | -- | -- | -- | -- | 15 | -- | 14 | -- | -- |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26, 1971 | 188 | 9 | 197 | 52 | 36.0 | 285 | 7.30 | 23.0 | 20 | <25.0 |
| NOV. 23...... | -- | -- | -- | -- | -- | 370 | 6.80 | 13.0 | -- | <25.0 |
| DEC. 14...... | -- | -- | -- | -- | -- | 96 | 6.90 | 10.0 | -- | 110.0 |

| DATE | DO MG/L | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|
| OCT. 26, 1971 | 5.8 | 1.0 | <33 | 1600 | 43 |
| NOV. 23...... | 6.9 | -- | -- | -- | -- |
| DEC. 14...... | 8.5 | 2.7 | -- | -- | -- |
| JAN. 25, 1972 | -- | -- | 20 | 100 | 3 |
| APR. 25...... | -- | -- | -- | 540 | 80 |
| JULY 25...... | -- | -- | 10 | 5000 | 8 |

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## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

## RED RIVER BASIN--CONTINUED

### 07364016 SALINE RIVER NEAR CROSSETT, ARK. (LAT 33 15 23 LONG 092 02 44)

REMARKS.--RECORDS FURNISHED BY ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY, LITTLE ROCK, ARK.

| DATE | STREAM FLOW CFS | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26, 1971 | 105 | 100 | 220.0 | 8.8 | 5.3 | 39 | 17 | 8 | 0.100 | 0.640 |
| NOV. 23...... | 190 | -- | -- | -- | -- | 39 | -- | 5 | -- | -- |
| DEC. 14...... | 2500 | -- | -- | -- | -- | 27 | -- | 5 | -- | -- |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26, 1971 | 98 | 11 | 109 | 44 | 22.0 | 129 | 6.90 | 22.0 | 10 | <25.0 |
| NOV. 23...... | -- | -- | -- | -- | -- | 111 | 7.30 | 10.0 | -- | <25.0 |
| DEC. 14...... | -- | -- | -- | -- | -- | 106 | 7.40 | 13.0 | -- | <25.0 |

| DATE | DO MG/L | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|
| OCT. 26, 1971 | 7.0 | 1.6 | 250 | 1800 | 80 |
| NOV. 23...... | 8.3 | -- | -- | -- | -- |
| DEC. 14...... | 10.4 | 1.1 | -- | -- | -- |

### 07364102 COFFEE CREEK NEAR FELSENTHAL, ARK. (LAT 33 01 58 LONG 092 04 26)

REMARKS.--RECORDS FURNISHED BY ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY, LITTLE ROCK, ARK.

| DATE | IRON FE,TOT UG/L | MANGNESE MN UG/L | CALCIUM CA,DISS MG/L | MGNSIUM MG,DISS MG/L | T ALK CACO3 MG/L | SULFATE SO4 MG/L | CHLORIDE CL MG/L | NO3-N TOTAL MG/L | PHOS-T P-WET MG/L |
|---|---|---|---|---|---|---|---|---|---|
| OCT. 26, 1971 | 500 | 750.0 | 84.0 | 10.7 | 214 | 40 | 350 | 0.900 | 1.400 |
| NOV. 23...... | -- | -- | -- | -- | 172 | -- | 350 | -- | -- |
| DEC. 14...... | -- | -- | -- | -- | 155 | -- | 285 | -- | -- |

| DATE | RESIDUE DISS-105 C MG/L | RESIDUE TOT NFLT MG/L | RESIDUE TOTAL MG/L | TOT HARD CACO3 MG/L | CALCIUM CACO3 MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | COLOR PT-CO UNITS | TURB JKSN JTU |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 26, 1971 | 1149 | 37 | 1186 | 256 | 212.0 | 1428 | 7.70 | 24.0 | 1280 | 110.0 |
| NOV. 23...... | -- | -- | -- | -- | -- | 1250 | 7.60 | 15.0 | -- | 180.0 |
| DEC. 14...... | -- | -- | -- | -- | -- | 3571 | 7.20 | 18.0 | -- | 120.0 |

| DATE | DO MG/L | BOD 5 DAY MG/L | FEC COLI MFM-FCBR /100ML | TOT COLI MFIMENDO /100ML | FECSTREP MF M-ENT /100ML |
|---|---|---|---|---|---|
| OCT. 26, 1971 | 1.6 | 22.4 | 2600000 | >2600000 | 1600 |
| NOV. 23...... | 0.0 | 95.0 | -- | -- | -- |
| DEC. 14...... | 0.0 | 108.0 | -- | -- | -- |

### 07367684 BOEUF RIVER NEAR INDIAN, ARK. (LAT 33 03 07 LONG 091 23 07)

REMARKS.--RECORDS FURNISHED BY ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY, LITTLE ROCK, ARK.

| DATE | STREAM FLOW CFS | T ALK CACO3 MG/L | CHLORIDE CL MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | TURB JKSN JTU | DO MG/L | BOD 5 DAY MG/L |
|---|---|---|---|---|---|---|---|---|---|
| OCT. 26, 1971 | 46 | 232 | 92 | 666 | 8.10 | 21.0 | 30.0 | 7.8 | 1.6 |
| NOV. 23...... | 65 | 217 | 107 | 625 | 8.20 | 9.0 | <25.0 | 9.9 | -- |

### 07369685 BAYOU MACON NEAR READLAND, ARK. (LAT 33 03 14 LONG 091 14 31)

REMARKS.--RECORDS FURNISHED BY ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY, LITTLE ROCK, ARK.

| DATE | STREAM FLOW CFS | T ALK CACO3 MG/L | CHLORIDE CL MG/L | CNDUCTVY AT 25C MICROMHO | PH SU | WATER TEMP CENT | TURB JKSN JTU | DO MG/L | BOD 5 DAY MG/L |
|---|---|---|---|---|---|---|---|---|---|
| OCT. 26, 1971 | 90 | 168 | 90 | 333 | 8.00 | 19.0 | 55.0 | 6.6 | 0.6 |
| NOV. 23...... | 92 | 170 | 25 | 333 | 7.90 | 9.0 | <25.0 | 9.1 | -- |

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< LESS THAN.

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

## ARKANSAS RIVER BASIN

### 07258500 PETIT JEAN RIVER NEAR BOONEVILLE, ARK. (LAT 35 06 25 LONG 093 55 25)

REMARKS.--Records furnished by Corps of Engineers, Little Rock, Arkansas.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1972

| DATE | DIS-CHARGE (CFS) | CONCEN-TRATION (MG/L) | DATE | DIS-CHARGE (CFS) | CONCEN-TRATION (MG/L) | DATE | DIS-CHARGE (CFS) | CONCEN-TRATION (MG/L) |
|---|---|---|---|---|---|---|---|---|
| OCT. 23, 1970 | 258 | 360 | JAN. 16, 1971 | 386 | 30 | DEC. 14, 1971 | 930 | 70 |
| OCT. 24...... | 1460 | 350 | FEB. 12...... | 1320 | 230 | DEC. 15...... | 2600 | 240 |
| OCT. 26...... | 212 | 130 | FEB. 12...... | 1460 | 210 | DEC. 16...... | 590 | 30 |
| OCT. 27...... | 1680 | 210 | FEB. 13...... | 530 | 60 | APR. 21, 1972 | 1820 | 230 |
| OCT. 28...... | 800 | 60 | FEB. 14...... | 358 | 40 | APR. 21...... | 1720 | 490 |
| NOV. 6...... | 5.4 | 20 | FEB. 19...... | 740 | 90 | APR. 21...... | 3000 | 640 |
| NOV. 9...... | 2600 | 420 | FEB. 19...... | 560 | 130 | APR. 22...... | 650 | 70 |
| NOV. 9...... | 860 | 150 | FEB. 20...... | 258 | 60 | APR. 23...... | 234 | 40 |
| NOV. 10...... | 332 | 60 | FEB. 23...... | 332 | 40 | JULY 1...... | 66 | 470 |
| NOV. 13...... | 170 | 20 | APR. 20...... | 234 | 120 | JULY 2...... | 54 | 540 |
| NOV. 14...... | 860 | 70 | APR. 21...... | 414 | 80 | JULY 2...... | 111 | 670 |
| NOV. 17...... | 234 | 30 | APR. 22...... | 170 | 60 | JULY 5...... | 34 | 40 |
| NOV. 20...... | 150 | 30 | APR. 23...... | 930 | 170 | SEP. 4...... | 94 | 530 |
| DEC. 14...... | 21 | 30 | APR. 24...... | 386 | 70 | SEP. 5...... | 94 | 50 |
| DEC. 21...... | 530 | 90 | APR. 26...... | 190 | 40 | SEP. 6...... | 16 | 20 |
| DEC. 22...... | 442 | 50 | DEC. 7...... | 620 | 170 | SEP. 7...... | 5.4 | -- |
| DEC. 24...... | 190 | 30 | DEC. 7...... | 442 | 170 | SEP. 18...... | 212 | 330 |
| JAN. 3, 1971 | 1560 | 780 | DEC. 8...... | 130 | 190 | SEP. 19...... | 79 | 80 |
| JAN. 4...... | 1490 | 210 | DEC. 9...... | 4200 | 920 | SEP. 20...... | 34 | 40 |
| JAN. 6...... | 282 | 30 | DEC. 9...... | 4740 | 400 | SEP. 21...... | 16 | 30 |
| JAN. 13...... | 2200 | 370 | DEC. 10...... | 29800 | 260 | SEP. 27...... | 306 | 270 |
| JAN. 14...... | 1720 | 170 | DEC. 11...... | 5840 | 80 | SEP. 28...... | 111 | 100 |
| JAN. 14...... | 1140 | 100 | DEC. 11...... | 1180 | 80 | SEP. 30...... | 94 | 40 |

## RED RIVER BASIN

### 07341500 RED RIVER AT FULTON, ARK. (LAT 33 36 26 LONG 093 48 49)

REMARKS.--Records furnished by Corps of Engineers, New Orleans, Louisiana.

| DATE | DEPTH (FT) | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) | DATE | DEPTH (FT) | MEAN DISCHARGE (CFS) | MEAN CONCEN-TRATION (MG/L) |
|---|---|---|---|---|---|---|---|
| OCT. 26, 1971 | 2.6 | 30000 | 368 | MAR. 28, 1972 | 6.0 | 7300 | 879 |
| OCT. 26...... | 13.0 | 30000 | 4240 | MAR. 28...... | 8.6 | 7300 | 461 |
| OCT. 26...... | 23.4 | 30000 | 15456 | APR. 25...... | 7.9 | 20000 | 252 |
| NOV. 16...... | 1.7 | 4600 | 1578 | APR. 25...... | 12.0 | 20000 | 327 |
| NOV. 16...... | 8.5 | 4600 | 2917 | MAY 30...... | 6.3 | 4600 | 60 |
| NOV. 16...... | 15.3 | 4600 | 9324 | MAY 30...... | 7.2 | 4600 | 65 |
| DEC. 21...... | 3.9 | 79000 | 1435 | JUNE 27...... | 7.8 | 4500 | 178 |
| DEC. 21...... | 19.5 | 79000 | 6691 | JULY 28...... | 7.8 | 2700 | 56 |
| DEC. 21...... | 35.1 | 79000 | 11935 | SEP. 26...... | 4.7 | 4400 | 85 |
| FEB. 29, 1972 | 6.5 | 7600 | 1291 | SEP. 26...... | 7.8 | 4400 | 68 |
| FEB. 29...... | 9.9 | 7600 | 1311 | | | | |

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

## WHITE RIVER BASIN

### 07069500 SPRING RIVER AT IMBODEN, ARK. (LAT 36 12 19 LONG 091 10 19)

| DATE | INSTANTANEOUS DISCHARGE (CFS) | SPECIFIC CONDUCTANCE (MICROMHOS) | TEMPERATURE (°C) | DATE | INSTANTANEOUS DISCHARGE (CFS) | SPECIFIC CONDUCTANCE (MICROMHOS) | TEMPERATURE (°C) |
|---|---|---|---|---|---|---|---|
| OCT. 27, 1971 | 364 | 462 | 18.0 | MAR. 08, 1972 | 559 | 470 | 10.0 |
| DEC. 01...... | 352 | 472 | 7.0 | APR. 12...... | 632 | 483 | 15.0 |
| FEB. 09, 1972 | 811 | 459 | 5.0 | | | | |

### 07074000 STRAWBERRY RIVER NEAR POUGHKEEPSIE, ARK. (LAT 36 06 37 LONG 091 26 59)

| DATE | MEAN DISCHARGE (CFS) | DISSOLVED MANGANESE (MN) (UG/L) | DISSOLVED NITRATE (N) (MG/L) | TOTAL PHOSPHORUS (P) (MG/L) | DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L) | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | BIOCHEMICAL OXYGEN DEMAND (MG/L) | IMMEDIATE COLIFORM (COL. PER 100 ML) | FECAL COLIFORM (COL. PER 100 ML) | STREPTOCOCCI (COLONIES PER 100 ML) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV. | | | | | | | | | | | |
| 03... | 53 | 60 | .00 | .03 | .00 | 401 | 7.6 | 2.6 | E12 | -- | E13 |
| DEC. | | | | | | | | | | | |
| 09... | 660 | 0 | .22 | .20 | -- | 340 | 7.9 | 1.9 | E3200 | E1000 | -- |

### FIELD ANALYSES

| DATE | MEAN DISCHARGE (CFS) | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | DISSOLVED OXYGEN (MG/L) | PERCENT SATURATION |
|---|---|---|---|---|---|---|
| NOV. | | | | | | |
| 03... | 53 | 455 | 7.8 | 16.0 | 9.0 | 90 |
| DEC. | | | | | | |
| 09... | 660 | 330 | 8.4 | 11.0 | 9.2 | 84 |

## ARKANSAS RIVER BASIN

### 07263300 LAKE MAUMELLE AT NATURAL STEPS, ARK. (LAT 34 51 57 LONG 092 29 20)

| DATE | TOTAL IRON (FE) (UG/L) | TOTAL MANGANESE (MN) (UG/L) | DISSOLVED CHLORIDE (CL) (MG/L) |
|---|---|---|---|
| JULY | | | |
| 14... | 0 | 0 | 2.6 |

| DATE | TOTAL ARSENIC (AS) (UG/L) | TOTAL CADMIUM (CD) (UG/L) | HEXAVALENT CHROMIUM (CR6) (UG/L) | TOTAL COBALT (CO) (UG/L) | TOTAL COPPER (CU) (UG/L) | TOTAL LEAD (PB) (UG/L) | TOTAL MERCURY (HG) (UG/L) | TOTAL NICKEL (NI) (UG/L) | TOTAL ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|
| JULY | | | | | | | | | |
| 14... | <10 | 0 | <10 | 0 | 3 | 2 | <.5 | 3 | 0 |

### 07263604 FOURCHE CREEK EAST OF LITTLE ROCK, ARK. (LAT 34 43 18 LONG 092 12 02)

| DATE | DISSOLVED NITRATE (N) (MG/L) | DISSOLVED NITRITE (N) (MG/L) | DISSOLVED AMMONIA NITROGEN (N) (MG/L) | ORGANIC NITROGEN (N) (MG/L) |
|---|---|---|---|---|
| MAY | | | | |
| 15... | .32 | .05 | .14 | .52 |

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E ESTIMATED.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

### ARKANSAS RIVER BASIN--CONTINUED

07263750 ARKANSAS RIVER AT LOCK AND DAM 3 NEAR SWAN LAKE, ARK. (LAT 34 09 50 LONG 091 40 44)

| DATE | TOTAL ARSENIC (AS) (UG/L) | TOTAL CAD-MIUM (CD) (UG/L) | HEXA-VALENT CHRO-MIUM (CR6) (UG/L) | TOTAL COBALT (CO) (UG/L) | TOTAL LEAD (PB) (UG/L) | TOTAL MERCURY (HG) (UG/L) | TOTAL ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | |
| 01-10 | <10 | 0 | <10 | 0 | 6 | <.5 | 10 |
| 11-20 | <10 | 0 | <10 | 0 | 8 | <.5 | 10 |
| 21-30 | <10 | 0 | <10 | 0 | 14 | <.5 | 30 |
| 31... | <10 | 0 | <10 | 2 | 16 | <.5 | 30 |
| NOV. | | | | | | | |
| 01-10 | <10 | 0 | <10 | 0 | 8 | <.5 | 30 |
| 11-20 | <10 | 0 | <10 | 1 | 15 | <.5 | 110 |
| 21-29 | <10 | 0 | <10 | 1 | 8 | <.5 | 40 |
| 30... | <10 | 0 | <10 | 1 | 4 | <.5 | 10 |
| DEC. | | | | | | | |
| 01-10 | <10 | 0 | <10 | 0 | 4 | <.5 | 40 |
| 11-20 | <10 | 2 | <10 | 4 | 25 | <.5 | 90 |
| 21-30 | <10 | 0 | <10 | 2 | 4 | <.5 | 10 |
| 31... | <10 | 0 | <10 | 1 | 3 | <.5 | 40 |

### RED RIVER BASIN

07359030 COVE CREEK AT JONES MILL, ARK. (LAT 34 26 20 LONG 092 52 40)

| DATE | INSTAN-TANEOUS DIS-CHARGE (CFS) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) |
|---|---|---|---|
| DEC. | | | |
| 14... | 44 | 352 | 4.3 |

| DATE | DIS-SOLVED ARSENIC (AS) (UG/L) | DIS-SOLVED CAD-MIUM (CD) (UG/L) | HEXA-VALENT CHRO-MIUM (CR6) (UG/L) | DIS-SOLVED COBALT (CO) (UG/L) | DIS-SOLVED LEAD (PB) (UG/L) | DIS-SOLVED MERCURY (HG) (UG/L) | DIS-SOLVED ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|
| DEC. | | | | | | | |
| 14... | <10 | 1 | <10 | 50 | 3 | <.5 | 310 |

07362590 LAKE WINONA AT REFORM, ARK. (LAT 34 47 51 LONG 092 50 43)

| DATE | TOTAL IRON (FE) (UG/L) | TOTAL MAN-GANESE (MN) (UG/L) | DIS-SOLVED CHLO-RIDE (CL) (MG/L) | TOTAL FLUO-RIDE (F) (MG/L) |
|---|---|---|---|---|
| JULY | | | | |
| 14... | 10 | 0 | 2.2 | .0 |

| DATE | TOTAL ARSENIC (AS) (UG/L) | TOTAL CAD-MIUM (CD) (UG/L) | HEXA-VALENT CHRO-MIUM (CR6) (UG/L) | TOTAL COBALT (CO) (UG/L) | TOTAL COPPER (CU) (UG/L) | TOTAL LEAD (PB) (UG/L) | TOTAL MERCURY (HG) (UG/L) | TOTAL NICKEL (NI) (UG/L) | TOTAL ZINC (ZN) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|
| OCT. | | | | | | | | | |
| 01-10 | <10 | 0 | <10 | 0 | -- | 0 | <.5 | -- | 0 |
| 11-20 | <10 | 0 | <10 | 0 | -- | 2 | <.5 | -- | 0 |
| 21-30 | <10 | 0 | <10 | 0 | -- | 0 | <.5 | -- | 0 |
| 31... | <10 | 0 | <10 | 0 | -- | 2 | <.5 | -- | 0 |
| NOV. | | | | | | | | | |
| 01-10 | <10 | 0 | <10 | 0 | -- | 2 | <.5 | -- | 0 |
| 11-20 | <10 | 0 | <10 | 0 | -- | 0 | <.5 | -- | 0 |
| 21-29 | <10 | 0 | <10 | 0 | -- | 0 | <.5 | -- | 0 |
| 30... | <10 | 0 | <10 | 0 | -- | 1 | <.5 | -- | 0 |
| DEC. | | | | | | | | | |
| 01... | -- | -- | -- | -- | -- | -- | .6 | -- | -- |
| 01-10 | <10 | 0 | <10 | 0 | -- | 2 | -- | -- | 0 |
| 02... | -- | -- | -- | -- | -- | -- | <.5 | -- | -- |
| 03... | -- | -- | -- | -- | -- | -- | <.5 | -- | -- |
| 04... | -- | -- | -- | -- | -- | -- | <.5 | -- | -- |
| 05... | -- | -- | -- | -- | -- | -- | <.5 | -- | -- |
| 06... | -- | -- | -- | -- | -- | -- | <.5 | -- | -- |
| 07... | -- | -- | -- | -- | -- | -- | <.5 | -- | -- |
| 08... | -- | -- | -- | -- | -- | -- | <.5 | -- | -- |
| 09... | -- | -- | -- | -- | -- | -- | <.5 | -- | -- |
| 10... | -- | -- | -- | -- | -- | -- | <.5 | -- | -- |
| 11-20 | <10 | 0 | <10 | 0 | -- | 0 | <.5 | -- | 0 |
| 21-30 | <10 | 0 | <10 | 0 | -- | 0 | <.5 | -- | 0 |
| 31... | <10 | 0 | <10 | 0 | -- | 0 | <.5 | -- | 0 |
| JULY | | | | | | | | | |
| 14... | <10 | 0 | <10 | 0 | 5 | 3 | <.5 | 2 | 0 |

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## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

## RED RIVER BASIN--CONTINUED

### SALINE RIVER NEAR NASHVILLE, ARK. (LAT 33 01 33 LONG 094 01 09)

| DATE | TOTAL IRON IN BOTTOM DE-POSITS (UG/G) | TOTAL MANGA-NESE IN BOTTOM DE-POSITS (UG/G) | TOTAL CADMIUM IN BOTTOM DE-POSITS (UG/G) | TOTAL CHRO-MIUM IN BOTTOM DE-POSITS (UG/G) | TOTAL COBALT IN BOTTOM DE-POSITS (UG/G) | TOTAL COPPER IN BOTTOM DE-POSITS (UG/G) | TOTAL LEAD IN BOTTOM DE-POSITS (UG/G) | TOTAL MERCURY IN BOTTOM DE-POSITS (UG/G) | TOTAL NICKEL IN BOTTOM DE-POSITS (UG/G) | TOTAL ZINC IN BOTTOM DE-POSITS (UG/G) |
|---|---|---|---|---|---|---|---|---|---|---|
| June | | | | | | | | | | |
| 22... | 13000 | 1000 | 9 | 6 | 1 | 4 | 15 | .2 | 16 | 26 |

### MILLWOOD LAKE NEAR ASHDOWN, ARK. (LAT 33 41 51 LONG 093 57 44)

| DATE | TOTAL IRON IN BOTTOM DE-POSITS (UG/G) | TOTAL MANGA-NESE IN BOTTOM DE-POSITS (UG/G) | TOTAL CADMIUM IN BOTTOM DE-POSITS (UG/G) | TOTAL CHRO-MIUM IN BOTTOM DE-POSITS (UG/G) | TOTAL COBALT IN BOTTOM DE-POSITS (UG/G) | TOTAL COPPER IN BOTTOM DE-POSITS (UG/G) | TOTAL LEAD IN BOTTOM DE-POSITS (UG/G) | TOTAL MERCURY IN BOTTOM DE-POSITS (UG/G) | TOTAL NICKEL IN BOTTOM DE-POSITS (UG/G) | TOTAL ZINC IN BOTTOM DE-POSITS (UG/G) |
|---|---|---|---|---|---|---|---|---|---|---|
| June | | | | | | | | | | |
| 22... | 15000 | 2500 | 1 | 8 | 2 | 6 | 18 | .2 | 18 | 38 |

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